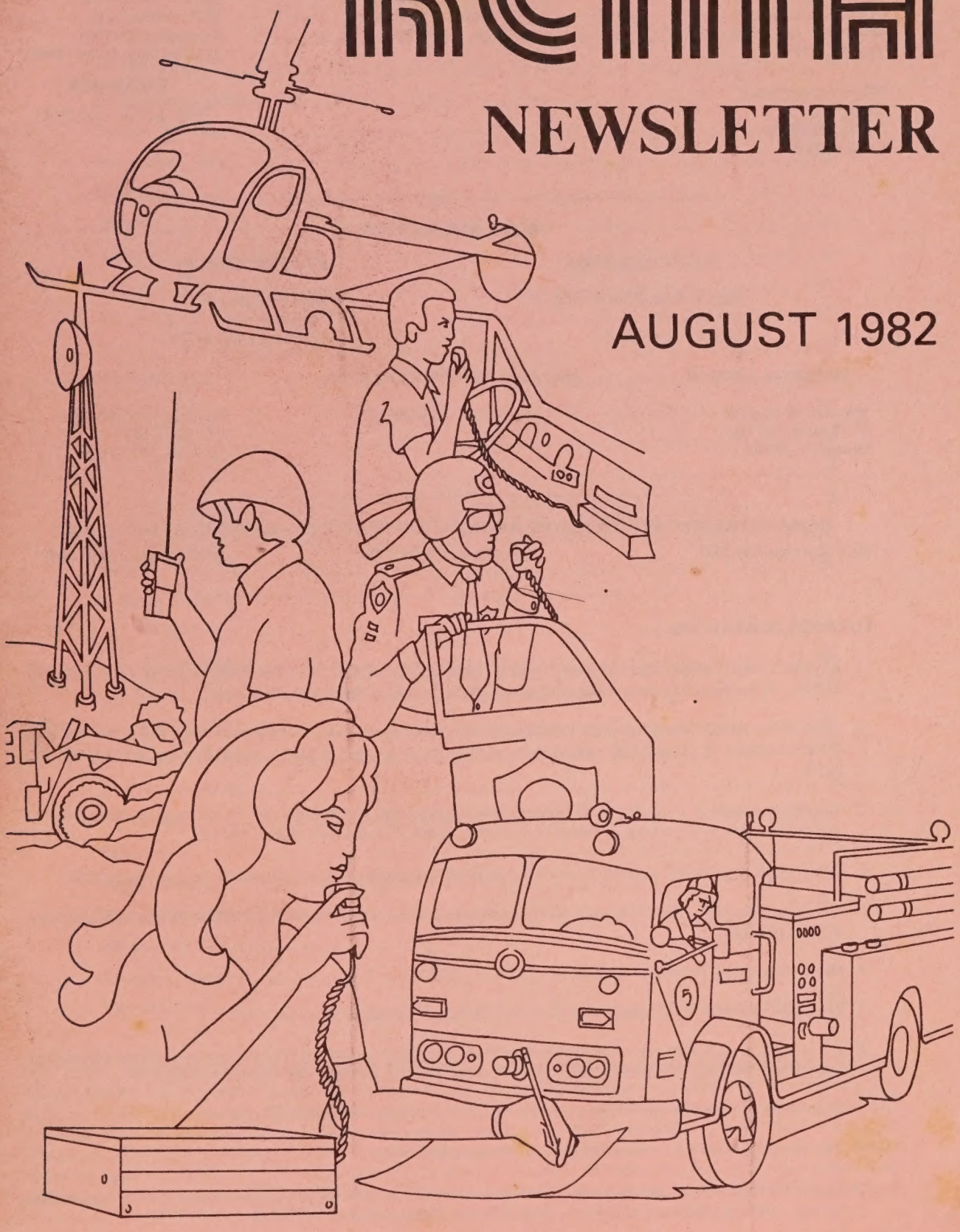
RCMA

NEWSLETTER

AUGUST 1982



FIRST NATIONAL AND INTERNATIONAL ORGANIZATION
OF MONITOR RADIO LISTENERS

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FOR YOUR INFORMATION:

1. All club business, unless otherwise noted, must be addressed to R.C.M.A., P.O. Box 4563, Anaheim, CA 92803. This includes matters that relate to renewals, changes of address, newsletter delivery problems, etc.

2. Input to the RCMA Newsletter must be mailed to the proper editors, whose addresses are included in the individual column headlines. If no particular column seems appropriate, send input to RCMA, 1 West Potomac, Williamsport, MD 21795.

3. To forward a letter to a specific RCMA member whose address you do not know, put your message to that person in a stamped envelope with your return address on it; mail to RCMA, P.O. Box 408, Earp, CA 92242.

4. Please include your RCMA membership number with all correspondence to newsletter editors or club headquarters.

5. If you require a reply when writing to RCMA headquarters or to one of the editors, you MUST enclose a self-addressed, stamped envelope.

6. Please write on only one side of the paper.

7. Please don't combine in one letter several items that should go to different addresses.

8. If you want to type what you submit to the newsletter, please don't exceed a seven-inch column width and please single space. Doing this may save an editor from having to retype the material. Please don't use script type.

9. Your RCMA membership number and expiration date appear on your newsletter mailing label.

10. You may join or renew your membership for ONLY one year at a time.

11. The RCMA Newsletter accepts paid advertising. If you would like to place a paid ad, please write to the following address for our advertising guidelines: RCMA Newsletter, P.O. Box 13602, St. Louis, MO 63138

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The RCMA Newsletter is published monthly by members of the RADIO COMMUNICATIONS MONITORING ASSOCIATION, P.O. Box 4563, Anaheim, CA 92803. Subscription rate/membership fee is $15.00 for U.S. residents. For persons in other countries, the following rates apply: Canada and Mexico—$17.00; Europe—$18.50, South Pacific and Asia—$20.00. These dues are payable in U.S. funds and are subject to change. Information contained herein is obtained primarily from members and does not necessarily present the position or reflect the opinion of RCMA as a whole. The RCMA Newsletter editors and officers are not responsible for the accuracy or validity of information contained herein. RCMA does not necessarily recommend or endorse products or services advertised herein. The publication is copyrighted©. Reproduction of any material in this newsletter is prohibited without prior written consent.

** Calendar **

Send notices of upcoming events for the Calendar section to:
John Clark, RCMA, P.O. Box 4563, Anaheim, CA 92803.
Please send notices well in advance of the Newsletter deadline.

Greater L.A. Area R.C.M.A. David A. Heywood, CALA001, Presiding
--Meetings tentatively scheduled each third Friday of the month--

July 16 FRIDAY Meeting at Mercury Savings and Loan, Valley View and Lincoln, Buena Park, Ca 8:00PM. 2nd Floor. Elevator in back.

A look at below 30 MHz. Members are requested to bring their Shortwave radios. The plan is to test different units and to have discussions on techniques of monitoring two-way transmissions way down there. This will be our first look into this particular area. Should be most interesting.

August No meeting this month. Every one should make an effort to otain new frequencies for future meetings in the Fall.

R.C.M.A. Chicago

Contact Edward Robert Sirovy IL-004 312 969 2856
311 S. Williams Street, Westmont, Il 60559

Meetings: NANCINI'S Resturant 5555 St Charles Road, Berkeley, Il
two blocks east of St Charles Road exit from Eisenhouer Expressway Extention I-290 (phone 312 544 7277)

July	31	1982	Saturday	1:00 PM
September	25	1982	Saturday	1:00 PM
November	13	1982	Saturday	1:00 PM

Possible picnic in late August and tours scheduled on short notice.
A SASE on file assures notification of the extras.

R.C.M.A. Connecticut Chapter

Contact Bill Moore CT 038 203-223-0840
950 Farmington Ave, New Britain, CT 06051

R.C.M.A. Dallas-Fort Worth

Contact Mike Pruden TX 072 metro 461 2602
Larry Van Horn TN 017 642 8407
David Coursey TX 107

Regular bi-monthly meetings are scheduled the second Saturday of each odd month Tenative location
Stoneridge Homeowner's Association Clubhouse
500 Grants Parkway, Arlington, Tx (SW of Arkansas and Collins)

Sept 11, 1982 7:00 PM
Nov 14, 1982 7:00 PM

For latest information and newsletter send a stack of SASEs to
Scanning Dallas/FortWorth
1111 N. Carrier Parkway #B-107
Grand Prarie, Tx 75050

Reports of Meetings and Officers

Send reports (informal accounts) of RCMA meetings, gatherings, etc. which have occured to:
John Clark, RCMA, P.O. Box 4563, Anaheim, CA 92803.

RCMA/Chicago *Newsletter 13* May 1982

Edited by Michael Yanul (IL-014)

Dates to Remember:

July 31,1982, Saturday, 1PM, Meeting - Nancini's, Berkeley, IL.
Aug. 22,1982, Sunday, Picnic at Poplar Creek Preserve - Hoffman Estates,IL.

MEETING REPORT: Bellwood Illinois Fire Chief, Bernard Rubicz, was our guest speaker for the April meeting which had 24 members and 4 guests in attendance. Chief Rubicz gave a most interesting discussion and slide presentation of his department. We again owe our thanks to Joe Vinci (IL-059) for making it possible.

After our guest speakér had finished, the meeting proceeded with several announcements from John Arendt (IL-012). The most surprising announcement was the resignation of RCMA President Mike Redman (MO-002). Mike resigned not only from the Board of Directors but also from the RCMA. Supposedly family matters prompted the resignation. Vice President Larry Smith (MI-001) will now be President and recently appointed Second Vice President, John Arendt (IL-012), becomes Vice President. The Second V.P. position will be filled at a later date.

A change in the coverage of some of the Public Safety columns was also announced. The East coast coverage will be split in half with the Northeast column covering the areas of Police Call Volumes 1 and 2. A new Southeast column will cover from the District of Columbia down to and including Florida. John Arendt's Central - Great Lakes Column will now include Ohio and Kentucky thus making the column's coverage of Police Call Volumes 3 and 4 complete. A new editor will write the Northwest Central column (Police Call Vol.5) and the South Central column will cover Vol.7. The West column and California column will remain unchanged (Vols. 8 and 9).

April Attendance: Ed Sirovy (IL-004), Ron Grzesik (IL-006), John Arendt (IL-012), Michael Yanul (IL-014), R.L. Neva (IL-025), Dennis Biagioli (IL-026), Rob Hupp (IL-036), Jerry Byron (IL-038), Joe Vinci (IL-059),James Cavanagh (IL-060), Pat Lynn (IL-079), Brandt Niemuth (IL-084), Harold Pinnow (IL-092), George Chao (IL-115), Will Sperling (IL-116), Martin Bourgeois (IL-125), Charles Marquardt (IL-130), Bob Quinlan (IL-157), Scott Lowry (IL-179) George Kroeck (IL-193), Dale Garbin (IL-205), Jack Waterman (CA-OR-118), George Moe (WI-004) Robert Trivalos (WI-026).

Mike Redman will surely be missed. Mike was a dedicated member for many years. As President, he worked with Larry Smith and John Arendt on long neglected editorial matters concerning the direction of the Newsletter. As Editorial Advisor, John Arendt in particular worked with Mike to fill the many editorial vacancies in the Newsletter. The recent cooperation within the Board of Directors should assure a continuation of the progress that has been accomplished to date. One of John's new editorial recruits was present at the April meeting. Dennis Biagioli (IL-026) was introduced as the new Federal/Military Column editor. Dennis' longtime interest and knowledge of government monitoring will be a proven asset to the column. It should be noted that the column will not include sensitive frequency information.

PICNIC ANNOUNCEMENT: The date of our Chapter's first annual (?) picnic has been set for Sunday, August 22, 1982 at the Poplar Creek Preserve located just West of Hoffman Estates and directly East of Elgin. The preserve is easily reached via the Northwest Tollway I-90. The picnic permit states that our picnic be held in the preserve's Shoe Factory Road Grove 2 location and that we will have a couple of hours use of the base-ball field. Ed Sirovy is forming a picnic committee to plan activities and to set a time. If you are good at planning picnics or would just like to lend a hand, contact Ed.

CHICAGO POLICE NEWS: As the News Media mentioned many months ago, the Department has formed a new Bureau of Field Tactical Services. The Bureau has three divisions: Gang Crime Enforcement South, Gang Crime Enforcement North and the Public Housing Crime Division. The Public Housing Division is an outgrowth of the old Cabrini-Green Vertical Patrol and is divided into three parts: North Section, with offices at Cabrini-Green, covering Areas 4,5 and 6; South Section with offices in the Robert Taylor housing project,covering Areas 1,2 and 3; and Division Headquarters which is also located at Robert Taylor. The Department built new paneled offices at Robert Taylor complete with steel shutters on the windows and a heavy metal entrance door.

The two Gang Crime Divisions are divided into three sections: An invest-igation section which develops information on street gangs and assists the Detective Division in investigations, Tactical sections which are deployed for street gang related crime and a federally funded enforcement section which will be deployed into designated neighborhoods.

Jeff McKnight (IL-064) recently toured the new District 3 - Grand Crossing Station and reports that a communications room was being prepared for back-up if the Dispatch Center at 11th and State fails to function. Jeff was also informed that patrolmen will be receiving new smaller and lighter weight Personal Portable Radios which will have a lower wattage output. New more powerful repeaters are supposedly to be installed.

SALVATION ARMY: During a major fire in the city or suburbs, some of the best descriptions of the fire scene can often be heard on the Salvation Army's repeater dispatch frequency - 461.500. One or several of the Army's Canteens may be dispatched depending on the size of the fire/disaster and severity of cold weather. RCMA/Chicago is proud to have several Canteen personnel in it's membership. Jeff McKnight (IL-064) and his brother Eric belong to Canteen 8 in the South Suburbs. Jeff is Captain/supply Officer and his radio signature is 804. Eric is Deputy Chief with a signature of 809. The Chief of Canteen 8 is Jim Mitidiero (IL-023) - signature 800. The dispatcher for Canteen Dispatch Central is fellow member Fred Broderick, Jr. (IL-018) who recently moved to the North side of Chicago and is a retired Chicago Fire Alarm Operator. Fred is also an Amateur Radio Operator (W9BGN). The following is a list of Metro Canteen Units and locations:

Canteen #1	Chicago (Eng. Co.22)
Canteen #2	Elk Grove Village
Canteen #3	Chicago (Eng. Co.14)
Canteen #5	Lisle-Woodridge
Canteen #7	Highland Park (Station 4)
Canteen #8	North Palos
Canteen #9	Antioch
Reserve Canteen #1	Chicago (Eng. Co.108)
Squad #1 Supply Van	Chicago (Eng. Co.14)

LIQUID CRYSTAL DISPLAY: I have had my Bearcat 100 for 6 months and have not experienced the problems that so many other members have had with their units. One occasional problem I do encounter is the disappearance of the LCD. Turning the unit off and on returns the readout. This has

only occured a few times so I hesitate returning it for repair. Generally the BC-100 LCD is not as readable as the one on the SONY ICF-2001 Short Wave receiver or that of many pocket calculators with a comparable LCD. A better display with back lighting should have been a priority with Electra.

While on the subject of Liquid Crystal Displays, the April issue of FLYING magazine had an interesting article on the use of LCD's in aviation. Recently Collins General Aviation introduced a new Transceiver with LCD. This is a first for general aviation. Up till now the required viewing angles in the cockpit meant that only incandescent or gas discharge displays could be used because of the limited viewing angles of LCD. Collins engineers worked with a supplier of LCD's and they developed a display that could be seen at any cockpit location. A new liquid and polarizing filters were used. The new wide angle viewing worked very well for backlighting at night and the new liquid responded fast enough to operate at the prescribed FAA minimum temperature of -30°C. Since LCD's require less power, less heat is generated and thus reliability of the radio is increased.

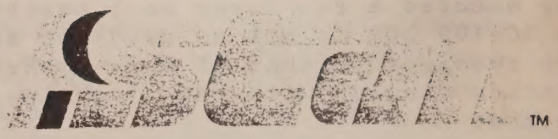
FCC RADIO INTERVIEW: WIND-AM Radio personality "Chicago Eddie" Schwartz has long been known for his interest in the Police and Fire Services and for his radio monitoring. "Chicago Eddie" has scanners at his apartment, in his car and in the broadcasting studio. Recently (April 26th) he interviewed George Sloam, FCC Assistant Engineer in charge of field operations in the Midwest. Thanks to Rich Bauer (IL-173) I am able to relate some of the highlights of the interview.

The interview covered several topics - Scanners, Marine Radio, CB and Radio Interference. The discussion on scanners was primarily on the legal aspects of monitoring two-way communications. Eddie Schwartz mentioned various forms and reasons for monitoring, such as the casual listener for enjoyment, a business listening in on it's competitor and the criminal burglarizing while tuned to the police. Sloam replied by citing section 605 of the Communications Act which prohibits the use of information gained from monitoring. In reference to the burglar or business that makes illegal use of two-way monitoring, Sloam said that the FBI is used to investigate the cicumstances and evidence is then turned over to the U.S. Attorney for evaluation. On the law abiding listener who monitors for his own enjoyment, Sloam said, "the casual reception is acceptable" - "it's the use and devulging of communications to others that is prohibited".

Schwartz brought up the subject of Marine Radio and the conjestion and abuse that occurs on the Distress Channel 16 (156.800). The question of whether or not the FCC should assign another channel for distress was discussed. Mr. Sloam said that the use of a single frequency for distress and calling, maximizes the number of radios tuned in and increases the likelihood of a distress call being heard. A second frequency would only dilute the chances of a call for help being answered. It was mentioned that the FCC has had an increase in staff at the Chicago office which will enable the FCC to monitor and promote proper usage of Marine Radio this summer.
P.S. Eddie Schwartz has since switched to WGN-AM Radio.

Following is a letter written by Robert A. Hansen, Managing Director of SCAN, to RCA President Larry Smith. The letter, along with an ELECTRA news release, is reprinted for the purpose of keeping our membership informed on the right of citizens to monitor the airways.

SCANNER ASSOCIATION OF NORTH AMERICA



Suite 1212 • 111 E. Wacker Drive • Chicago • Illinois 60601

May 26, 1982

Mr. Larry Smith
President
RCMA
1223 Vinsetta
Royal Oak, Michigan 48067

Dear Larry:

I thought you would be interested in receiving an advance copy of our latest issue of SCAN Magazine with news of our success in Philadelphia. Also enclosed is a copy of a press release from Electra on the subject. At this hour an appeal is still possible, but we hope the issue is laid to rest.

Chuck Gysi was very helpful in testifying at the hearing ... and I believe his fellow RCMA members and all scanner owners owe him a sincere vote of thanks.

I also think that it is time Electra Company get some credit for stepping forward to provide the legal assistance needed when no other manufacturer would.

At SCAN we are going to redouble our efforts to have members alert us at the first mention of proposed restrictive legislation regarding listening to the airwaves. In the meantime it will be nice to finally be able to say that there is not a single area in the U.S. that prohibits the use of scanners!

Best regards,

73, Bob

Robert A. Hanson
Managing Director

news from Electra

Date May 20, 1982

For Release Immediate

ectra Company ☐ Division of Masco Corp. of Indiana ☐ 300 East County Line Road ☐ Cumberland, Indiana 46229

For more information contact:

Richard T. Murphy
Electra Company
317/894-1440

ANTI-SCANNER LAW IN PHILADELPHIA

IS DECLARED UNCONSTITUTIONAL

Philadelphia, Pennsylvania -- The traditional American right of persons to listen to the airwaves has been successfully defended in Philadelphia, Pennsylvania.

The city of Philadelphia recently began enforcing a 1967 ordinance which was actually enacted before the scanner radio was invented in 1968. By interpreting the law to apply to scanners, the city attempted to make it illegal to sell, possess or use a scanner radio -- even in a private home -- within the city limits. Although the law has been in effect for 15 years, it was not enforced in Philadelphia until last fall, when several owners and employees of retail stores were arrested for selling scanners. It was the only area in the entire U.S.A. that had such a restriction.

In dismissing charges against the defendants, Municipal Court Judge J. Earl Simmons, Jr., determined that Section 10-817 of the Code of Philadelphia ordinances (anti-police radio receiver case) is unconstitutional as being beyond the permissible scope of the police power of the city council and as being unduly oppressive upon individuals. The judge ruled that the citations

charging summary offenses should be dismissed and the defendants discharged.

Judge Simmons went on to say, "The market ... is made up of individual owners who use it (the scanner radio) for personal entertainment or security purposes. Group use (of scanner radios) is endorsed, and in fact encouraged, by local law enforcement agencies which conduct programs to teach the use of such scanner radios as a crime combatant. The reception of police and fire calls has many beneficial social by-products reflected in the activities and publications of these citizen organizations ... There is no evidence to support the contention that access to the police or fire channels increases crime, or the risk thereof, or interferes in any way with the unhampered conduct of the police and fire activities; on the contrary, it demonstrates a markedly decreased risk of criminality when such scanners are employed by the citizenry. Thus, the conclusion is compelled that the ordinance is unconstitutional."

Electra Company launched the scanner industry in 1968 when it introduced the first scanner radio. Since that time, the market for scanners has grown steadily. To date, the industry has sold over 6 million units, penetrating about 7 percent of U.S. households.

ASSOCIATION OF NORTH AMERICAN RADIO CLUBS NEWS HIGHLIGHTS

ANARC is a federation of the most responsible, well established radio listening clubs in North America. RCMA attained Full Member status in ANARC in 1977. For a list of the ANARC Member and Associate Member clubs send a self-addressed, stamped business size envelope with your request to the address below.

For an annual subscription to the ANARC Newsletter, send $5 to:
Joe Barr, 1500 Bunbury Drive, Whittier, CA 90601. ($8 overseas subscription.)

Dave Browne, ANARC Executive Secretary, who has been a moving force in the ANARC organization is not running for reelection this year. He has served in this position for the last eight years. During this time there has been a ten fold increase in the ANARC newsletter subscriptions. Dave has been Mr. ANARC to RCMA since our inception. We hope he will keep contributing to ANARC as an exofficio member of the executive council.

AUGUST 13,14,15 International Radio Club of America will hold a convention at the Holiday Inn, Moline, Illinois. IRCA is primarily a group of medium wave DXers which publishes "DX Monitor". So far no local convention address is available. Sample newsletters for $.50 is available from IRCA, PO Box 26254, San Francisco, CA, 94126.

Aug 13-15 International Radio Club of America (IRCA) Annual convention for Medium Wave AM DXers at Holliday Inn, Moline, Illinois. For information send a S.A.S.E. to John Clemmer, 4524 Seventh St Apt 2303, Ease Moline, IL 61244

Sept 3-5 National Radio Club (NRC) Annual convention for Medium Wave AM Dxers For Information send SASE to NRC, PO Box 32125, Louisville, KY 40232

TROPICAL GUIDE NORTH AMERICAN SHORTWAVE ASSOCIATION has their "Tropical Band Guide" available (2.000 to 5.900 Mhz) for $3.00 in USA $4.00 Non USA NASWA, PO box 2284, Minneapolis, MN 55402

CENTURY PRINT SHOP 6059 Essex St., Riverside, CA 92504 has just released another endless list of books and publications at 25% or more off. (this writer has received the list also, and am impressed at the prices and the various combinations. If you are looking at any publications, It will pay to check here first. On one of his many offers --and he has many-- this writer noted he could obtain
Tom Kneitel's 4th edition "Top Secret Registry"
TAB's "How To Tune the Secret Shortwave Spectrum", Helms
World Radio TV Handbook 1981 ed
for $21.5 + tax shipping included. List price $33.40. 35% discount)

A BIG HAPPY 4TH ANNIVERSARY to INTERNATIONAL DXer's CLUB of SAN DIEGO and to President Larry Brookwell, 1826 Cypress St, San Diego, CA 92194.

This club specializes in the reviews of shortwave equipment, some scanners and a bit of RTTY. They have a comprehensive review of shortwave hobby equipment. If you are contemplating a purchase of any HF equipment it may pay to obtain their equipment review 1981 and supplements for $16.55

THOUGHT waves

Ginny Slick, RCMA Assistant Editor, 1 West Potomic, Williamsport, MD 21795

I should receive forty lashes with a length of wet coax for the unforgiveable mistake that I have made. I have been sitting here smugly awaiting the end of May to write my next column. Today I received the issue containing my first column. The date on it was June..... JUNE????? A rush to my RCMA desk drawer and Carol Ruth's explicit instructions confirmed my worst fears. I missed the July deadline. Needless to say, a card has been taped in plain view over my desk this afternoon. It gives all deadlines (a week early) to make sure it never happens again.

This month my thoughts are turning to the friendly people in our hobby. I have received some very nice correspondence since beginning my membership in RCMA. It is symbolic of our organization's stated

aim of sharing information and helping other monitor radio listeners. The letter appearing in Your Thoughts is an example.

Many times we think that what we might have to offer is old and we don't volunteer it. I have been amazed at how much I didn't know as I gleaned information from the pages of this newsletter. Those of us who listen to our local police know the area 10-Codes by heart. We tend to think that everyone else knows them too. Sometimes I listen to an out-of-state PD, and I would love to know what certain signals or codes mean. Conversation surrounding the codes leads me to the sure knowledge that they are not being used with the same meaning as in my area. A simple contribution becomes a very helpful one to someone in our membership.

I can't estimate the worth of the information given to me by the member who put me on to taping from my scanner. It made possible the finding of numerous working freqs while I was out gallivantin' around. I certainly count as priceless the frequency coverage gained when I learned about I.F. s from the newsletter. Today these hints seem so simple to me, but once they were gems of knowledge that greatly enhanced my enjoyment of scanning.

My thoughts are also on section 605 and the struggle our organization has had with the proper interpretation and stand we should take with respect to it. It is tantalizing to be aware that if we only knew the right frequencies or had the right equipment we could know so much more about the workings of our government. Speaking just for myself, I know the helpless feeling I get as I go to the polls. I cannot base my selection on any real knowledge. Perhaps that is the psychology of our "wanting to hear it for ourselves". We trust ourselves and what we hear more than we trust the politicians or press.

I agree with the policies of RCMA in its attempt to abide by the regulation. I truly hope that if we err, it is on the side of national security. Half the fun of intercepting something newsworthy is doing it yourself and not depending on someone else to provide the frequency. As one who has lived most of her life "on the banks of the Potomac", I know that the catchers of the biggest bass are the least apt to tell you where to go to catch 'em. Deer hunters closely guard the locations of their spots. My advice to you is to do your homework, follow the trail, and as always.....happy hunting!

Ginny

YOUR THOUGHTS

1 West Potomac, Williamsport, MD 21795

To the Editor:

This is just a bit of info I'd like to share with other RCMA members who may have FCC Microfiche and would like to have their own reader without spending a fortune to do so.

Try to find a Kodak Ektalite 140 Reader in a microfilm supply store. It's simple to operate, weighs under 5 lbs., and takes up less room on your desk than a 10" TV set. It uses a 12 volt auto dome light bulb and is hooded so it can be read even in bright sunlight. It even has a built-in plug that allows you to use it in your car.

I cut the male plug off of a regular TV "cheater cord" and now have a 12 volt adaptor cord. Best of all I found this reader, used, for 35 dollars in the first store I went to. You may want to hunt around for one if you do a lot of "skip monitoring", or travel with a mobile scanner out of town a lot as I do, It's a dandy little unit, no matter how you use it !

Frank (NV 011)

Business, Etc.

This column is for reporting frequency and radio system information for the following varied services: business, forest products, petroleum industry, special industrial, manufactureers, news media (behind-the-scenes radio, TV & newspaper), motion picture industry, security (private patrol, detective agencies, campus security & police, amusement park & stadium security, shopping center & mall security, plant/business/hotel security, etc.), General Mobile Radio Service (GMRS), mobile phone/RCC & paging, trucking firms, bus lines, taxi cabs, tow trucks, utility companies (private & municipal water, power, electric, gas, telephone, etc.), and all school & college related frequencies. Send information and questions pertaining to the radio services covered in this column to:

Larry Smith, 1223 Vinsetta Blvd., Royal Oak, MI 48067.

GREETINGS FROM THE GREAT LAKES STATE AND WELCOME TO ANOTHER BUSINESS, ETC. COLUMN. AT THIS WRITING, MID APRIL, SOME OF THE SEASONAL BUSINESSES WE HEARD DURING THE COLD WINTER MONTHS ARE BEING REPLACED BY THE OTHERS HEARD DURING THE WARMER MONTHS OF THE YEAR, WHICH ADDS VARIETY TO THIS INTERESTING BAND AS SOMETHING DIFFERENT IS ALWAYS GOING AS COMPARED TO A FEW OTHER SERVICES.

JIM [GA-012] SENT A MOST INTERESTING POT-POURRI OF BUSINESSES HE MONITORS IN GEORGIA TO SHARE WITH US. I'LL TRY TO RUN THROUGH AS MANY AS I CAN JIM AND SAVE THE OTHERS FOR LATER.: THE FOLLOWING ARE FOR LA GRANGE AND TROUP COUNTY:

35.860	KVR-358	BLOSSMAN GAS SERVICE
35.900	KRZ-633	DANIEL LUMBER COMPANY
154.540	KYZ-311	KNIGHT CONSTRUCTION
157.500	KMJ-836	EAST I-85 GULF STATION
461.750	WRY-338	FRIENDLY APPLIANCE CO. [OUTPUT]
466.750	WRY-338	FRIENDLY APPLIANCE CO. [INPUT]
462.700	KAC-5664	ALUMINAL PRODUCTS [G.M.R.S.]
35.740	KWX-324	VULCAN MATERIALS
35.920	KVY-514	HUNT DAIRIES
43.320	KUM-303	DIXIE WELL BORING
151.775	KGZ-256	CREWS MUSIC
152.270	KCY-295	CITY CAB [BASE]
157.530	KCY-295	CITY CAB [MOBILES]
152.360	KKP-509	LA GRANGE BIKE SHOP
152.390	KII-298	ARROW CAB [BASE]
157.650	KII-295	ARROW CAB [MOBILES]

THANKS FOR A VARIETY OF THINGS TO MONITOR DOWN THERE JIM, OTHERS WILL FOLLOW IN COMING ISSUES.

KEVIN [KS-019] SENDS ALONG A BEAUTIFUL LIST OF CEDAR POINT, OHIO SERVICES. THIS MEMBER LOOKS LIKE HE HAS SPENT TIME AT THE PARK AND THOSE HEADING THERE WILL FIND THIS OF INTEREST, I'M SURE:

CEDAR POINT AMUSMENT PARK -- SANDUSKY, OHIO

461.300	KI-447	SECURITY CHANNEL 1
466.300	- - - -	SECURITY CHANNEL 2
464.575	- - - -	PARK OPERATION
151.685	- - - -	KEY EMPLOYEE PAGING SYSTEM
154.190	- - - -	FIRE
154.440	- - - -	FIRE
156.425	KXS-342	CEDAR POINT MARINA [NON-COMMERCIAL CH. 68]
*156.450	- - - -	COMMERCIAL [COMMON AT STATE DOCKS CH. 9]
*156.800	- - - -	CALLING, DISTRESS [CH. 16]
156.450	WYZ-6708	COMMERCIAL [CH. 9]
156.425	WYZ-6708	NON-COMMERCIAL [CH. 68]
156.600	WHZ-6708	PORT OPERATIONS [CH. 12]
156.800	WYZ-6708	CALLING, DISTRESS [CH. 16]

[*] = KXS-342 USED HERE TOO

461.300 - - - - SECURITY FREQUENCY

UNIT NUMBERS USED AT PARK FOR SECURITY:

CP	1	POLICE CAR
CP	2	POLICE CAR
CP	3	POLICE CAR
CP	4	AMBULANCE
CP	6	POLICE JEEP
CP	7	AMBULANCE
CP	8	PARK TOW TRUCK
CP	9	PARK TOW TRUCK
CP	10	PARK TOW TRUCK
CP	13	FIRE, SAFETY INSPECTORS
CP	55	FIRE TRUCK
CP	66	FIRE TRUCK
CP	67	PUMPER

SIGNAL CODES USED BY ALL PERSONNEL OPERATING ON THE SECURITY FREQUENCY

1	CALL THE STATION
2	COME TO THE STATION
3	SEE COMPLAINANT
4	RED LIGHT/SIREN
6	SUSPICIOUS PERSON OR VEHICLE
8	HIT AND RUN
9	NON-INJURY ACCIDENT
10	INJURY ACCIDENT
11	OFFICER NEEDS HELP
12	FIGHT OR DISTURBANCE
15	FIRE
17	OUT OF SERVICE
18	IN SERVICE
26	PRISONER IN CUSTODY
33	D. V. I.
36	INTOXICATED SUBJECT
32	NARCOTICS COMPLAINT
38	SHOP LIFTER

SECURITY FREQUENCIES ARE UTILIZED BY C.P. PARK WRECKERS, FIRST AIDE STATIONS, FIRE PERSONNEL, ALSO AT TIMES PARK OPERATIONS TOP BRASS HAVE BEEN HEARD USING THE SECURITY FREQUENCIES IN CONJUNCTION WITH SECURITY PERSONNEL.

ALL FIRE VEHICLES INCLUDING THE FIRE AND SAFETY INSPECTORS AND AMBULANCES ARE EQUIPPED TO OPERATE 155.19; 154.44. ALSO ALL FIRE VEHICLES, SAFETY INSPECTORS, AMBULANCES CAN OPERATE ON THE MAIN SECURITY FREQUENCY WITH MOBILE AND HAND-HELDS.

[Ed Note: MANY THANKS FROM ME AND THE MEMBERS FOR AN EXCELLENT PROFILE ON ONE OF THE MOST VISITED PARKS IN THE COUNTRY. I LEFT OUT THE SAFETY LISTING AS I WILL BE IN TOUCH WITH YOU BECAUSE I AM IN NEED OF SOME MORE INFORMATION. THE SAFETY MATERIAL WILL APPEAR LATER ON.]

WITH THIS COME TO AN END FOR THIS MONTH THE OTHERS WHO HAVE SENT IN MATERIAL FOR THIS COLUMN, YOURS WILL BE SEEN HERE SOON. AT THE TIME I TOOK THIS COLUMN OVER I HAD TO PUT IN MATERIAL ON MY OWN WAITING FOR INPUT SO NOW THAT YOU ARE SENDING IN MATERIAL I HOPE TO KEEP ADDING YOUR EFFORTS AS MUCH AS POSSIBLE. UNTIL NEXT MONTH....

LARRY [MI-001]

PAID ADVERTISEMENT

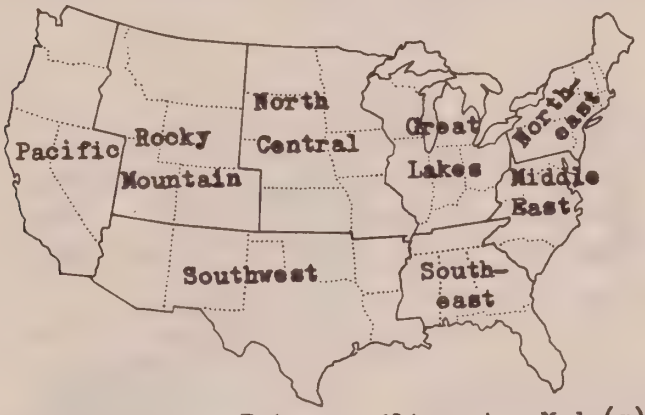
BELOW 30 MHZ

Robert Horvitz, editor

This column is for AM, SSB, RTTY, CW & FAX reception reports, explanatory notes, articles, news & questions related to HF utilities. Services covered in this column include civilian aeronautical, coastal/marine, government, military, weather, etc. — essentially everything except broadcasting, CB & amateur radio. Send to: Robert Horvitz, 54 East Manning St., Providence, RI 02906 If you need a reception report form, please enclose a SASE with your request.

The Civil Air Patrol

Jeff Howell (KY-023) sent a bunch of material about CAP, which I've distilled below. He describes himself as "a former CAP member and officer with about 4 years' experience in the organization, particularly in communications." Now he's executive director of a nationwide private search-and-rescue organization called Lifeline SAR (PO Box 463, Madison, IN 47250). Thanks for your contribution, Jeff! It publicizes the good work done by CAP, and should yield some interesting monitoring:



Region	Primary	Alternate	Mode(s)
All Regions	2.371	—	SSB
	2.3725	—	RTTY
	2.374	—	CW/SSB
	4.582	—	SSB
	4.585	—	CW
	26.620	—	AM
(HI only)	26.620	—	AM/CW
Northeast	4.4645	4.585	SSB
	4.4675	—	CW
Middle East	4.585	—	CW
	4.585	4.4675	SSB
Great Lakes	4.6025	4.5075	SSB
	4.6025	—	CW
South East	4.4675	—	CW
	4.4675	4.585	SSB
	4.585	4.582	SSB
	4.585	—	CW
North Central	4.5075	—	CW
	4.5075	4.5859	SSB
South West	4.627	4.630	SSB
	4.630	—	CW
Rocky Mountain	4.5995	4.6025	SSB
	4.6025	—	CW

The Civil Air Patrol is a civilian auxiliary of the US Air Force. For operational purposes, CAP divides the US into 52 "wings" (the 50 states plus Puerto Rico & DC) grouped into 8 regions (see map).

The National Emergency Frequency, installed in all regions' radios, is 4.582 MHz/SSB. It is used for calling —much like VHF Marine Channel 16. After contact is established, all communications are switched to the region's primary channel. Adjacent regions have different primaries, to avoid interference.

Every CAP member is permitted to install & operate their "own" radio equipment. Consequently, there are thousands of transmitters nationwide, and you'll likely hear a lot of traffic on CAP frequencies. Communications encountered on the regional channels may range from routine administrative traffic (nets are held on a scheduled daily basis), to mission-oriented traffic if a wing or region is engaged in a SAR operation.

Most CAP members' radios have the region's primary & alternate HF/SSB channels and the same-in-every-region VHF channels. The latter are:

143.750 (for missions only)
143.900 (for repeater input—simplex, in some areas)
148.150 (for repeater output & common simplex)
149.925 (for air-to-ground only)

Every region & wing is assigned an FCC callsign. For example, the Indiana wing is KSC953; it is part of the Great Lakes region, which is KSF248. Jeff Howell believes that in practice, these

Region	Primary	Alternate	Mode
Pacific	4.585	—	CW
(not AK or HI)	4.585	4.5045	SSB
(AK & HI only)	4.585	4.582	SSB

signs are only used by the region's communications officer and the Wing Net Control Station. Regional staff officers identify with a "tactical" prefix: the region's name. For example, the Great Lakes Regional Commander would be GREAT LAKES 1 for fixed, GREAT LAKES MOBILE 1 for mobile, and GREAT LAKES AIR 1 for aero mobile. Similarly, each wing has its own tactical call prefixes. The Indiana wing is assigned RED FIRE for fixed (base) stations, BLUE FIRE for land mobiles, and GREEN FIRE for aero mobiles. Each of these would be followed by a serially-assigned number indicating the specific CAP member's identity: RED FIRE 1 would be the Indiana Wing Commander (as would BLUE FIRE 1 and GREEN FIRE 1). A member may have more than one callsign if he operates more than one radio (e.g., one in each of two vehicles).

The word RESCUE is inserted in any armed forces, CAP or Coast Guard Auxiliary aircraft callsign when the craft is actually engaged in a SAR mission: GREEN FIRE RESCUE 5, for example. This enables them to operate in SAR-reserved airspace without having violations filed upon them for unauthorized entry.

Anyone can purchase the CAP Communications Manual, CAPM 100-1, from Civil Air Patrol National Headquarters, The Bookstore, Maxwell Air Force Base, Montgomery, AL 36112, for $1.50 postpaid. Jeff Howell also volunteers to answer questions about CAP. You can write to him c/o Lifeline SAR (address above); please send a SASE.

New & Forthcoming Domestic HF Aero Allocations

There aren't that many of them, but, as promised last month, here they are, according to the Federal Register of Feb 2 82, sent in by Ed Sirovy (IL-004) and Michael Yanul (IL-014). a) = available now & until Feb 1 83 b) = available after 0001Z, Feb 1 83

Aircraft operating in support of offshore drilling in open waters beyond the range of VHF: a) 2.973 4.654 b) 2.878 3.019 3.434 4.672 5.463 5.508

Flight test stations for test of equipment, emergency & backup use only for communication with aircraft beyond the range of VHF: a) 2.868 2.994 3.474 4.675 4.682 5.469 5.596 6.559 8.917 10.009 11.287 11.375 13.312 17.965 b) 2.851 3.004 3.443 5.451 5.469 5.571 6.550 8.822 10.045 11.288 11.306 13.312 17.964 21.931

Alaska For use on domestic air routes, & by FAA, throughout Alaska: a) 2.861 5.631 b) 2.866 5.631 Aleutian chain & feeders: a) 2.924 3.446 6.568 10.057 11.295 11.319 b) 2.875 2.911 3.470 5.484 6.580 6.604 8.876 11.357 Central & Southeast Alaska & feeders: a) 2.875 2.924 3.481 5.547 6.568 6.617 10.041 b) 2.875 2.911 3.470 5.484 6.580 6.604 8.876 11.357 For en-route, off-route & unscheduled flights (may be used between fixed stations for communications directly concerning aircraft with which they're engaged): a) 3.411 4.3838* 4.668 4.693 b) 3.449 4.3838* 5.472 5.490 *emergency communications; no airborne operations

Grove's Shortwave Frequency Directory

It would have been better to review this along with the new editions of the SPEEDX Utility Guide and Perry Ferrell's Confidential Frequency List—both of which cover the same turf in different ways and both of which are due out this summer—but neither has slithered through my mail-slot yet. I'm writing this on June 1; you're reading the "August" issue of the Newsletter, and Grove's Shortwave Frequency Directory will have been available for some 3 months already. I can't see letting another month pass, so comparisons with the other entrees in the HF-ute reference field will have to take place later.

I'm told that RCMA policy forbids me to mention the price of this 218-page, large-format, spiral-bound paperback—that would be "free advertising". Check elsewhere in this issue for a Grove Enterprises ad, or write to 140 Dog Branch Rd, Brasstown, NC 28902 for price + shipping info. (Can I say that the book'll set you back a shade less than $15?)

Comments received here about the Directory have been pretty harsh so far—more negative than I think is justified. Perhaps this is because Grove himself is a controversial character, provoking strong reactions. Perhaps the book's promotion has

raised expectations too high, so that people feel disappointed when they might otherwise have been impressed by such an ambitious and well-presented document. After all, Grove's press release touted it as "the most exhaustive directory of agencies and frequencies using the HF spectrum ever published." It may well be that—but having been told that in advance, people begin to look beyond that to specific details, and they discover that the book has flaws as well as strengths.

The material is organized like Steve Handler's now-out-of-print Radio Communications Guide, only on a much larger scale (Handler is credited in Grove's introduction as "an invaluable source of information for portions of this publication"). That is, the frequencies are presented agency by agency, starting with the US Air Force (Strategic Air Command, Tactical Air Command, In-Flight Command & Control, with lists of tactical callsigns and air bases), then progressing through NORAD, the US Navy, Army and Coast Guard, LORAN, US & foreign stations in Antarctica, the MARS network, foreign military (English-speaking countries + Cuba), FEMA, US Dept of State and embassies (US & foreign), NSA(!), the FCC, the Immigration & Naturalization Service, NOAA, CW beacons & number stations, smuggling networks, Interpol, the Red Cross Emergency Network, fixed radiotelephone stations... That's only the first half of the book, and I've omitted some of the shorter lists. Some lists are accompanied by brief notes on system operations, transmission sites, callsigns, etc. (I'd've liked to have seen even more of this sort of stuff). The Directory closes with a section devoted to CW, FAX, RTTY & broadcast feeders. This part is sketchier than the rest of the book, which is voice-oriented.

The main problem with the Directory, however, is the decay-rate of the information it contains. This is a treacherous time to put out any sort of frequency guide —let alone one of this scope—if only because of the creeping implementation of the WARC decisions. To cite an example I'm embarassingly familiar with, the ICAO En-route Air-to-Ground frequencies that Grove has on page 115 are more or less identical to the list I published here last May—and just as obsolete. William Wedertz (IL-007) points out that Grove's list of "USAF Bases Worldwide" on p. 19 includes 3 bases in South Vietnam, as well as Lockbourne AFB in Ohio, which Wedertz says "had a name change to Rickenbacker around 1974". It's forgivable to publish data that went out of date while the book was at the printer's; it's much less forgivable to publish data that's been out of date for 8 years! For this reason alone, I would have liked to have some indication of where the information for each list came from —to be able to judge how recent, how reliable, how well-corroborated it is. The only "credited" entry I noticed was for the National Security Agency on p. 82: "The following list of frequencies comes from an annonymous /sic/ contributor, so no guarantee is made regarding its accuracy." Fair enough. If other lists had their sources indicated Grove wouldn't have to take all the blame for errors, and errors detected in one list wouldn't make the rest of the book seem suspect.

One should not jump to the conclusion from these examples that the book is so peppered with errors that it's unreliable or useless. That is simply not the case. Most of the listings agree with other published and unpublished sources I have access to, and correspond with my own monitoring experience (though some are more or less unverifiable in the limited time I've had the book). The great virtue of the Shortwave Frequency Directory is gathering so much material together in one handy volume, and presenting it in a form that is so easy to understand and use. Two minor, organizational suggestions for the second edition: the table of contents should be alphabetized (now it follows the same sequence as the book itself; this suggestion comes from Glenn Hauser), and collate all the agency lists into a single frequency-order list at the end of the book. As comprehensive as it is, it's easy to see how it could be improved by further enlargement—to include more maps, more operational details, propagation charts, etc. (with no increase in price, please!).

The best thing I can say about Grove's Shortwave Frequency Directory is that no one document that I've ever seen gives such a grand overview of what can be heard in the nonbroadcasting parts of the HF band. It's a goad for exploring shortwave more deeply, and that, for me, outweighs the occasional inaccuracies.

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For Whom the Tolls: Bell

David Lawson (MI-071) wrote to say he enjoyed Ron Pokatiloff's article on AT&T's high seas radiotelephone service: "In fact I liked it so well I called my dad in Ft. Lauderdale and asked him to call WOM for more frequencies. He went down to WOM—they gave him a tour and a list of frequencies for KMI, WOO and WOM." Thanks for sending the list, Dave. Here tis, straight from Ma Bell's own mouth:

KMI
Point Reyes, CA

ch#		Coast	Ship
401	a	4.3574	4.0630 MHz
416	b	4.4039	4.1095
417		4.4070	4.1126
804	a	8.7282	8.2043
809	b	8.7437	8.2198
822	a	8.7840	8.2601
1201	a	13.1008	12.3300
1202	b	13.1039	12.3331
1203	b	13.1070	12.3362
1229	a	13.1876	12.4168
1602	a	17.2360	16.4631
1603	b	17.2391	16.4662
1616		17.2794	16.5065
1624		17.3042	16.5313
2214	b	22.6363	22.0403
2223		22.6642	22.0682
2228		22.6797	22.0837
2236	a	22.7045	22.1085

a) Traffic Lists broadcast at 0000Z+every 3 hrs, weather at 0000Z, 0600Z & 1500Z

b) Traffic at 0100Z+every 3 hrs, weather at 1300Z & 1900Z

c) Traffic at 0000Z+every 4 hrs, weather at 1200Z & 2000Z

d) Traffic at 0100Z+every 4 hrs, weather at 1300Z & 2100Z

WOO
Manahawkin, NJ

ch#		Coast	Ship
410	c	4.3853	4.0909
411	d	4.3884	4.0940
416	e	4.4039	4.1095
422	f	4.4225	4.1281
808	e	8.7406	8.2167
811	f	8.7499	8.2260
815	d	8.7623	8.2384
826	c	8.7964	8.2725
1203	f	13.1070	12.3362
1210	c	13.1287	12.3579
1211	d	13.1318	12.3610
1228	e	13.1845	12.4137
1605	d	17.2453	16.4724
1620	e	17.2918	16.5189
1626	f	17.3104	16.5375
1631	c	17.3259	16.5530
2201	e	22.5960	22.0000
2205		22.6084	22.0124
2210		22.6239	22.0279
2236	f	22.7045	22.1085

e) Traffic at 0200Z+every 4 hrs, weather at 1400Z & 2200Z

f) Traffic at 0300Z+every 4 hrs, weather at 1500Z & 2300Z

g) Traffic at 0030Z+every 4 hrs, weather at 1230Z

h) Traffic at 0130Z+every 4 hrs, weather at 1330Z

WOM
Ft. Lauderdale, FL

ch#		Coast	Ship
403	g	4.3636	4.0692
412	h	4.3915	4.0971
417	i	4.4070	4.1126
423	j	4.4256	4.1312
802	g	8.7220	8.1981
805	h	8.7313	8.2074
810	i	8.7468	8.2229
814		8.7592	8.2353
825	j	8.7933	8.2694
831		8.8119	8.2880
1206	g	13.1163	12.3455
1208	h	13.1225	12.3517
1209	i	13.1256	12.3548
1215	j	13.1442	12.3734
1223		13.1690	12.3982
1230		13.1907	12.4199
1601	g	17.2329	16.4600
1609	h	17.2577	16.4848
1610	i	17.2608	16.4879
1611	j	17.2639	16.4910
2215	g	22.6394	22.0434
2216	h	22.6425	22.0465
2222		22.6611	22.0651

i) Traffic at 0230Z+ every 4 hrs, weather at 2230Z

j) Traffic at 0330Z+ every 4 hrs, weather at 2330Z

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Shards & Glimmers

Dick Stedman (MA-071) turned me on to a book that might interest you: The Flying White House--The Story of Air Force One by Jerald terHorst & Ralph Albertazzie ($11.95 from Coward, McCann & Geoghegan, 1050 W. Wall St., Lyndhurst, NJ 07071) The authors of this 350-page book published in 1979 know their subject first-hand: terHorst was Pres. Ford's press secretary and Albertazzie piloted AF-1 under Nixon. It details the activity surrounding Presidential travel, from FDR to Carter, with innumerable anecdotes, though it's a bit repetitive (2 authors = some things told twice). Another member--sorry I can't remember who--told me about Assault on the Liberty--The True Story of the Israeli Attack on an American Intelligence Ship by James M. Ennes, Jr. ($12.95 from Random House, 299 pp., 1979). I'm about half way through it. So far it's great--very revealing about how these maritime mobile monitoring craft do their thing, and very harrowing recollections of the attack (the author was one of the survivors; 34 were killed, 171 wounded).

How much money are you spending on monitoring this year? In Sweden (according to Svenska Dagbladet, Jan 12 82, via JPRS), "It has been proposed that the Radio Institute of the Armed Forces, which is responsible for radio intelligence monitoring over the Baltic Sea, among other areas, should receive 153.9 million crowns." That's about $26.3 million. How much do you suppose the US gov't spends on monitoring?

YONHAP, the South Korean news agency reported Dec 31 81 that the Asia & Pacific News Network was beginning operations on Jan 1 82. The network "will transmit in English domestic news of their countries for 15 minutes each day. The newscast will be conveyed to each member news agency via 5 relay stations located in Jakarta, Manila, New Delhi and 2 other sites." Next month: is RTTY worth the cost of access?

CANADA

Send Canadian frequency information, radio system details and other information relating to Canadian monitor radio listening and questions to:
Robert Berezowski, 5832 Dalhousie Drive NW, Calgary, Alberta T3A 1T1 Canada.

Welcome all to this month's Canada column. According to the calendar it is spring, almost summer in fact. Two days ago we had a snow storm. I would hope that that was the last snow of the season. I am hoping for some warm weather soon. There is nothing like summer time in the city. I have a lot of material for this month, more than I can print. I think you should find something of interest.

When I first started my column I wrote some information on the laws regarding scanners here in Canada. In the March 82 column I printed some excerpts from an article that appeared in "CB Canada" in Sept 81. The laws, as I understand them, are as follows. In Canada the regulation of scanners is solely the responsibility of the Federal government, specifically the Dept. of Communications. The DOC regulations state that all monitors must be licenced. In order to obtain this licencing, the operator must obtain the written permission from all possible agencies that the scanner could monitor. This is of course impossible for a programmable scanner. An amendment to the law has been made that makes the scanner immune to licencing if the receiver is capable of receiving public broadcasting bands.

Recently I received a letter from Tom (CAN-084), a new member of RCMA. Tom is not a new comer to the hobby however. The DOC has told him that the licencing system was set up for fixed frequency receivers (for example "rock-bound" crystal scanners). The DOC stated they really couldn't licence a programmable scanner. They did say that a person could get in trouble if the scanner is used for personal gain, or if you interfere with other users of the spectrum. An example is "ambulance chasing" at accidents, or generally getting in the way of police and fire officials. Tom also goes on to say that various police officers have seen his scanner, but none have asked about it. My advice to anyone with a scanner is to use it discretely. At the moment it appears there is little enforcement of the laws here in Canada, but I personally would not wish to start a trend in the wrong direction.

Chris (CAN-061) has sent along a copy of the OPP Review. In this magazine was an article on the new OPP radio system. I will not print the entire article, but below are the more relevant excerpts.

The new system is much more complex than the old simplex radios. Many features have been designed into the system. The article does not give any frequencies of course, but below are some of the major operational characteristics.

1. A network of remote radio sites cover about 400,000 square kilometres of the province. Over 100 radio towers with microwave links between them are used.
2. Telephone handsets will be used in the mobile radios, allowing for privacy of communications.
3. The system provides for different modes of operation. In the normal mode of operation, several automatic features are included. Several status buttons will be installed on the radio heads in the car. A simple push of a button will call the dispatcher, and also identify the unit calling. Other status buttons will transmit the unit status, such as enroute, at scene, available for calls, or at

the detachment office. In the normal mode of operation, the central dispatcher can send a call to one, two or all units simultaneously. This means, for example, that not all the officers will hear a negative reply to a CPIC inquiry.
4. A tactical mode is also available. The dispatcher will work with a select group of cars. This mode will be used for special events, pursuits, or other emergencies. Units in the tactical mode will not interfere with surrounding units, and other units will not interfere with the emergency.
5. The Ontario Police Commission common channel will be available on the radios. This allows for the communication with other police forces in Ontario.
6. A phone patch through the telecommunications room will allow the detachment commander to talk to his members in the field.
7. Another group of channels on the new radios will be referred to as "simplex." These car to car channels will have no automated features, and will back up the automatic system. The various motorcycles and small boats in the OPP inventory will only be able to use the simplex channels. Vibration and exposure to the elements make the entire package impractical.

The new system is being installed now. Chris has personally seen the South Porcupine District HQ, where walls had been ripped out and holes drilled in floors and ceilings. The system should be fully implemented by mid-1983, with the possibility that some areas of southwest Ontario might start using the new system early. The system also allows for centralized dispatch and automated occurance handling (computerized dispatch).

That is all the information I have. I do not have any of the new frequencies yet, indeed I do not believe any of the new transmitters are on the air. If I do hear of any, I will certainly pass them on. However, there is possible trouble on the horizon. As I have mentioned before, there is some opposition to the project. Some environmental groups believe that their future children will have green skin and 4 arms because of the effects of the microwaves from the towers. What these environmentalists do not realize is that the microwaves will be beamed in a pencil-thick beam above their heads. I have even heard from one member that work on the new system has been halted. I have not been able to confirm this, but I think that too much money has been invested for the OPP to cancel the project. I guess we will just have to wait and see.
At any rate, a big thank you goes to Chris for passing on the above information on the new system.

Just as a matter of curiosity, I have gotten a tip that the RCMP Security Service in Quebec City are using Digital Voice Protection (DVP). Can anyone in or near Quebec City confirm this?

Alex (CAN-040) has sent along the following bit of information on the Canadian Coast Guard. "Private" conversations have been heard on 157.050 (CH 21A), and Alex suspects they might also be on 157.175 (Ch 83A). These two channels are unused duplex channels associated with the recorded weather broadcasts on 161.650 (Ch21B) and 161.775 (Ch 83B). Standard marine radios cannot receive or transmit on these two private channels. Alex also advises that private commercial operations associated with maritime traffic can be heard just outside the marine band immediately above 157.425 (Ch88).

Some examples are 157.460(Chi-Cheemaun ferry)and 157.485 (sport diving tug Huron Brave) in the Tobermory area (Georgeon Bay area).

Last month I printed some material from Dave (CAN-037). I forgot to add the following material:

Windsor Public Works		162.330
Windsor Transit	Buses	B411.4875/416.4875M
	Administration	162.180

Thanks for the info Dave.

I am going to finish off this column with some portions of lists contributed by members. The marine information immediately below is from Myron (CAN-057). I will be printing more from this list in future columns. The information on the Ontario and Metro Toronto Ambulance services comes from a larger list that Bruce (CAN-019) sent. I will of course also be printing more of his list. For me, well I must again disappear back into the Twilight Zone. I have to go back to making pizzas all day, and try to figure out the insane antics of one of the waitresses (we just call her wacky). Actually she's a good waitress overall. Anyway, until next month best wishes and good monitoring.

MARINE STATIONS

STATION	CHANNELS	SERVICES
ALERT BAY-VAF	16,21,26	TRAFFIC LISTS & WEATHER
BULL HARBOUR-VAG	16,26	TRAFFIC LISTS & WEATHER
COMOX-VAC	16,26,39	TRAFFIC LISTS & WEATHER
PRINCE RUPERT-VAJ	16,21,22A,26	TRAFFIC LISTS & NAVIGATION
SANDSPIT-VAH	16,21,26	TRAFFIC LISTS
TOFINO-VAE	11,16,22A,26,74,6	TRAFFIC CONTROL ZONE
VANCOUVER-VAS	6,11,12,16,22A,26,74	TRAFFIC CONTROL ZONE
VICTORIA-VAK	16,22A,26	TRAFFIC LISTS
OCEAN STATION -PAPA	16	NAVAGATION,WEATHER, RADIO BEACON

B.C. FERRY CORPORATION

155.91 PORT OPERATIONS	153.74 PORTABLES
RADIOTELEPHONE TRANSMIT	RADIOTELEPHONE RECEIVE
454.0375	459.0375
454.0875	459.0875
454.1375	459.1375
454.1875	459.1875
454.2375	459.2375
454.3375	459.3375

WEATHER CHANNELS

161.775	CANADIAN COAST GUARD CONTINOUS MARINE WEATHER
162.40	CONTINUOUS CANADIAN WEATHER BROADCASTS

ONTARIO HOSPITAL AMBULANCE SERVICE - PRIORITY CODES

CODE 1	Any call which may be delayed without physically being detrimental to the patient.	No Lights or Siren
CODE 2	Scheduled Call which must be done at specified time. This is not scheduling due to a patient's preference and convenience.	No Lights or Siren
CODE 3	Prompt Call - done with minimal delay. All patients in this category are stable or under professional care and are not in immediate danger of death.	Visual Warning Device (Lights) only when necessary.
CODE 4	Urgent Call - Life threatening nature where time is of the essence.	A/V warning where necessary.
CODE 5	Obviously Dead.	
CODE 6	Legally Dead.	
CODE 7	Unstaffed at station.	
CODE 8	Ambulance deployed for Standby Duty.	
CODE 9	Servicing.	
CODE 0	Movement of Unit not mentioned above.	

METROPOLITAN TORONTO AMBULANCE SERVICE

152.375* R	Metro Ch 1 - North West Dispatch✓	
151.820* R	Metro Ch 2 - North East Dispatch	
150.530* R	Metro Ch 3 - South West Dispatch✓	
148.165* R	Metro Ch 4 - South East Dispatch✓	
149.410	Metro Ch 5 - Tactical	
150.100*	Metro Ch 6 - PROVINCIAL COMMON	
148.360	Metro Ch 7 - Administration	
156.195	Metro Ch 8 - Re-Broadcast on Ch 5 by mobile repeater in Supervisor's vehicles.	
418.6875*	Helicopter Ambulance Unit 799 - Air to York Control.	
413.687	York Control to Air.	

NOTE:
1. Ambulances operating outside their home base areas are required to communicate on OHAS Provincial Common Channel - 150.100 MHz.
2. 8 Paramedic Channels - 5 UHF and 3 VHF - have been allocated, but are not as yet in use (May/81). Sources suggest the following Telemetery Channels:
   413.7625
   413.8125
   413.8375
   413.8625
   413.8875
   149.695
   149.620
3. All confirmed Channels are marked *.

(05/81)

contact/info wanted

This column has two purposes: to help members contact each other, and to help members obtain information directly from one another on various subjects related to 2-way communications monitoring. If you desire to converse, meet, or correspond with other members by telephone, letter, or cassette tape in a certain geographic area or with members who have similar listening interests, this is the perfect place for you to make known your interests. Remember – those who respond will do so directly, so be sure to provide your phone number, the best time to be called, or your address. Write to:

John W. Darr, P.O. Box 1652, Cheyenne, WY 82001.

ALABAMA FREQs WANTED: Codes for the following Alabama counties: Jefferson, Shelby, and St. Clair. Also for cities Mt. Brook and Leeds. Will exchange for codes he has, and will pay postage. Would like any and all frequencies of general interest for Birmingham metro area. (4-2-82)

SCOTT CARR (AL-Ø15), P O Box 1485, Birmingham, AL 35201-1485

FREQS WANTED FOR PITTSBURGH, PA and MORGANTOWN, WV: Member eager to exchange his list of frequencies for yours of Pittsburgh and Morgantown. (5-1-82)

THOMAS RISHEL (PA-1Ø9), 47 E Berkeley St, Uniontown, PA 15401 // (412) 439-2874 after 5

STEAM TRAIN TAPES: Here's a new one: a member who wants to swap tapes of steam locomotives. He has several with train sounds on one channel and railroad radio on the other, recorded from just behind the engine. Others from ground, aboard mid-train. Some with, some without radio. (5-3-82)

TOM OVERALL (GA-Ø36), P O Box 77154, Atlanta, GA 30357

MASSACHUSETTS HOSPITAL INFO WANTED: Member needs hospital security frequencies and set-ups in Massachusetts -- public, general, state, federal, and base-mobile networks. Please contact by mail only; he promises to answer all letters. (5-8-82)

RONALD E GUILES (MA-1Ø9), 60 Grove St, Lowell, MA 01851

OH/PA FREQS WANTED: Member looking for codes and frequencies and ambulance codes (I think!) for the following: Youngstown and Mahoning County, Ohio and neighboring cities of Indiana County Pennsylvania. (5-10-82)

CHRIS WERTZ (PA-???), Box 294 RD #2, Johnstown, PA 15904 // (814) 539-3451

WANTED: Service manual (not operator's) for Bearcat 101. Electra can't seem to supply. Will copy and return, or will pay for copies. (5-19-82)

GEORGE DuBOIS (OR-ØØ1), 10048 NE Campaign, Portland, OR 97220

9 CODES? Here's a member looking for information on the "9 codes" in use by the Oakland, CA, police. (5-23-82)

BILL PHILLIPSON (CASC-Ø29), 18954 Pendergast Ave, Cupertino, CA 95014

URGENT! Need Albany, NY, police codes. And right away! (5-25-82)

DANIEL CURRY (NY-Ø92), 44 Wintergreen Ave, Newburgh, NY 12550

SKI PATROL FREQs WANTED: Need Ski Patrol frequencies of the major areas, especially Aspen, Snowmass, Sun Valley, Mamoth, CA, etc. Any info appreciated; will pay postage, etc. (5-31-82)

GRAY FUNKE (CALA-Ø32), 1050 W Pacific Coast Highway, Harbor City, CA 90710

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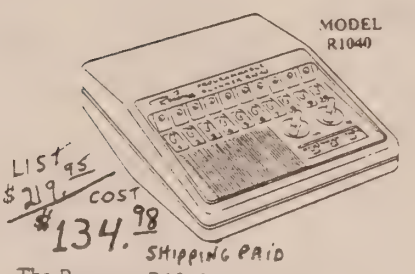

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FCC TOPICS

George DuBois, Editor

FCC news and information of interest relating to two-way communications. Send comments and questions to:
George DuBois, 10048 NE Campaign, Portland, OR 97220

I'm going on vacation within a few days of the time this is written, so I haven't got a lot of time to waste doing this column. (Well put, huh?) So I thought I'd stick in this frequency allocation table, similar to the one in the front of the May newsletter. This isn't quite as detailed, since it doesn't list the base and mobile-only frequencies separately, nor the channel spacing, but I think it's a little more accurate and the spelling is better.

This is the updated version of the table that appears inside the back cover of Police and Fire Frequency Listing, put out by Bob Gehri (Wa-007). For that reason you'll note that T-Band (470-512) isn't even mentioned since the closest place to here it's used is San Fransisco. I can testify to its accuracy since I'm the guy that made it up. If you'd like your own personal copy, send me a long SASE.

FREQUENCY ALLOCATION TABLE

FREQUENCY RANGE	SERVICE
29.700 - 29.800	FOREST PRODUCTS RADIO SERVICE
29.800 - 29.890	FIXED SERVICES
29.900	U.S. GOVERNMENT
29.920 - 29.990	FIXED SERVICES
30.000 - 30.560	U.S. GOVERNMENT
30.580 - 30.640	SPECIAL INDUSTRIAL RADIO SERVICE
30.660 - 30.820	PETROLEUM - FOREST PRODUCTS - MOTOR CARRIER
30.840 - 31.260	BUSINESS - MOTOR CARRIER - FORESTRY CONSER.
31.280 - 31.980	FORESTRY CONSERVATION - SPECIAL INDUSTRIAL
32.000 - 33.000	U.S. GOVERNMENT
33.020 - 33.160	HIGHWAY MAINT. - SPECIAL EMERG. - BUSINESS
33.180 - 33.380	PETROLEUM RADIO SERVICE
33.400	BUSINESS RADIO SERVICE
33.420 - 33.980	FIRE RADIO SERVICE
34.000 - 35.000	U.S. GOVERNMENT
35.020 - 35.180	BUSINESS RADIO SERVICE
35.160	TELEPHONE MAINTENANCE RADIO SERVICE
35.220 - 35.620	MOBILE TELEPHONE - PAGING - SPECIAL INDUST.
35.640 - 35.680	PAGING
35.700 - 35.720	BUSINESS RADIO SERVICE
35.740 - 35.860	SPECIAL INDUSTRIAL RADIO SERVICE
35.880 - 35.980	BUSINESS RADIO SERVICE
36.000 - 37.000	U. S. GOVERNMENT
37.020 - 37.420	POLICE - LOCAL GOVERNMENT
37.440	FOREST PRODUCTS RADIO SERVICE
37.460 - 37.860	POWER COMPANIES
37.880	FOREST PRODUCTS RADIO SERVICE
37.900 - 37.980	HIGHWAY MAINTENANCE
38.000 - 39.000	U.S. GOVERNMENT
39.020 - 39.980	POLICE - LOCAL GOVERNMENT
40.000 - 42.000	U.S. GOVERNMENT
42.020 - 42.940	STATE POLICE
42.960 - 43.000	BUSINESS RADIO SERVICE
43.020 - 43.180	SPECIAL INDUSTRIAL RADIO SERVICE
43.160	TELEPHONE MAINTENANCE (MOBILE UNITS)
43.220 - 43.620	MOBILE TELEPHONE - PAGING - SPECIAL INDUST.
43.640 - 43.680	PAGING
43.700 - 44.600	MOTOR CARRIER RADIO SERVICE
44.620 - 45.040	POLICE - FORESTRY CONSERVATION
45.060 - 45.640	POLICE - LOCAL GOVERNMENT
45.660 - 45.860	POLICE - HIGHWAY MAINTENANCE
45.880	FIRE, INTERSYSTEM
45.900 - 46.040	POLICE - SPECIAL EMERGENCY
46.040 - 46.500	FIRE
46.520 - 46.580	LOCAL GOVERNMENT
46.600 - 47.000	U.S. GOVERNMENT
47.020 - 47.400	HIGHWAY MAINTENANCE
47.420 - 47.680	SPECIAL EMERGENCY - SPECIAL INDUSTRIAL
47.700 - 48.540	POWER COMPANIES
48.560 - 49.500	FOREST PRODUCTS - PETROLEUM COMPANIES
49.520 - 49.580	FOREST PRODUCTS - SPECIAL INDUSTRIAL
49.600 - 50.000	U.S. GOVERNMENT - PT. 15, LOW POWER
50.000 - 54.000	AMATEUR RADIO SERVICE
54.000 - 72.000	BROADCASTING - T.V. CH. 2,3,4
72.000 - 76.000	FIXED, PORTABLE
76.000 - 108.000	BROADCASTING - T.V. CH. 5,6, F.M.
108.000 - 136.000	AERONAUTICAL
136.000 - 144.000	U.S. GOVERNMENT
144.000 - 148.000	AMATEUR RADIO SERVICE
148.000 - 150.800	U.S. GOVERNMENT
150.815 - 150.965	AUTO EMERGENCY RADIO SERVICE
150.980	PETROLEUM (OILSPILL CLEAN-UP)
150.995 - 151.130	HIGHWAY MAINTENANCE RADIO SERVICE
151.145 - 151.490	FORESTRY CONSERVATION
151.490 - 151.595	SPECIAL INDUSTRIAL RADIO SERVICE
151.625 - 151.955	BUSINESS RADIO SERVICE
151.985	TELEPHONE MAINTENANCE RADIO SERVICE
152.0075	SPECIAL EMERGENCY (PAGING)
152.030 - 152.240	RADIO COMMON CARRIERS
152.270 - 152.480	TAXI - BUSINESS RADIO
152.510 - 152.810	MOBILE TELEPHONE
152.840	PAGING
152.870 - 153.035	SP.INDUST. - REMOTE BROADCAST - MOTION PICTURE
153.035 - 153.395	REMOTE PICKUP - MFG. - FOREST PRODUCTS
153.410 - 153.725	POWER COMPANIES
153.740 - 154.115	FIRE - LOCAL GOVERNMENT
153.130 - 154.445	FIRE
154.460 - 154.490	LOCAL GOVT. - POWER - SPEC. INDUSTRIAL
154.515.- 154.625	BUSINESS - FOREST PRODUCTS
154.585	PETROLEUM (OILSPILL CLEAN UP)
154.650 - 154.950	POLICE
154.965 - 155.145	POLICE - LOCAL GOVERNMENT
155.160 - 155.400	SPECIAL EMERGENCY - POLICE
155.415 - 155.700	POLICE
155.715 - 156.030	LOCAL GOVERNMENT - POLICE
156.045 - 156.240	HIGHWAY MAINTENANCE - POLICE
156.275 - 157.425	MARINE BAND
157.450	SPECIAL EMERGENCY (PAGING)
157.470 - 157.515	AUTO EMERGENCY RADIO SERVICE
157.530 - 157.710	TAXI (MOBILE UNITS) - BUSINESS
157.740	PAGING
157.770 - 158.070	MOBILE TELEPHONE (MOBILE UNITS)
158.100	PAGING
158.130 - 158.265	POWER - PETROLEUM - FOREST PRODUCTS
158.280 - 158.460	PETROLEUM - FOREST PROD. - MANUFACTURERS
158.490 - 158.670	RADIO COMMON CARRIERS (MOBILE UNITS)
158.700	PAGING
158.730 - 158.970	LOCAL GOVERNMENT - POLICE
158.985 - 159.195	HIGHWAY MAINTENANCE - POLICE
159.225 - 159.465	FORESTRY CONSERVATION
159.480	PETROLEUM (OILSPILL CLEAN-UP)
159.495 - 160.200	MOTOR CARRIER RADIO SERVICE
160.215 - 161.565	RAILROAD RADIO SERVICE
161.600	MARINE BAND
161.640 - 161.760	REMOTE BROADCAST PICKUP
161.800 - 162.000	MARINE TELEPHONE
162.000 - 174.000	U.S. GOVERNMENT
163.250	SPECIAL EMERGENCY (PAGING)
166.250	REMOTE BROADCAST PICKUP
170.150	REMOTE BROADCAST PICKUP
173.225 - 173.375	RELAY PRESS - FOREST PRODUCTS - PETROLEUM
174.000 - 216.000	BROADCASTING - T.V. CH. 7 THROUGH 13
216.000 - 220.000	U.S. GOVERNMENT (TELEMETRY)
220.000 - 225.000	AMATEUR RADIO SERVICE
225.000 - 400.000	U.S. GOVERNMENT (MILITARY AERONAUTICAL)
400.000 - 406.100	SATELLITE - METEOROLOGICAL
406.100 - 420.000	U.S. GOVERNMENT
420.000 - 450.000	AMATEUR RADIO SERVICE
450.000 - 451.000	REMOTE BROADCAST PICKUP
451.025 - 451.150	POWER COMPANIES
451.175 - 451.750	POWER - PETROLEUM - FOREST PRODUCTS
451.775 - 452.025	SPECIAL INDUSTRIAL RADIO SERVICE
452.050 - 452.300	TAXI - FOREST PRODUCTS
452.325 - 452.500	TAXI - FOREST PROD. - MOTOR CARR. - R.R.
452.525 - 452.600	AUTO EMERGENCY RADIO SERVICE
452.625 - 452.950	MOTOR CARRIER - RAILROAD
452.975 - 453.000	RELAY PRESS RADIO SERVICE
453.025 - 453.975	POLICE - LOCAL GOVT. - HWY. MAINT.- FIRE
454.000	PETROLEUM (OILSPILL CLEAN-UP)
454.025 - 454.350	RADIO COMMON CARRIER
454.375 - 454.975	MOBILE TELEPHONE
455.000 - 456.000	REMOTE BROADCAST PICKUP
456.000 - 460.000	MOBILE UNITS, 5 MHZ ABOVE REPEATER OUTPUT
460.025 - 460.550	POLICE
460.575 - 460.625	FIRE
460.650 - 462.175	BUSINESS RADIO SERVICE
462.200 - 462.450	MANUFACTURERS RADIO SERVICE
462.475 - 462.525	MFG. - POWER - TEL. MAINT. - FOREST PROD.
462.550 - 462.725	GENERAL MOBILE RADIO SERVICE (CB)
462.750 - 462.925	BUSINESS (PAGING)
462.950 - 463.175	SPECIAL EMERGENCY RADIO SERVICE
463.200 - 465.000	BUSINESS RADIO SERVICE
465.000 - 470.000	MOBILE UNITS, 5 MHZ ABOVE REPEATER OUTPUT
470.000 - 806.000	BROADCASTING - UHF T.V.
806.000 - 866.000	LAND MOBILE, ALL SERVICES

FEDERAL GOV'T and MILITARY

Send all Federal Government and Military frequencies (including those of military aircraft), radio system details, and related questions to:
Dennis Biagioli, 607 W. Pleasant Ave., Villa Park, IL 60181

Sensitive frequencies will not be published. Coast Guard material must go to the VHF Marine editor.

Hi! What a month. I just returned from four days in Washington, D.C. with 225 eighth grade students. Fourteen of us kept the little darlings company through the completely enjoyable, although exhausting, experience. The students voted the F.B.I. Building tour and the Smithsonian Air and Space Museum and tops. As you might imagine, with a ratio like we had, not much time was spent listening to any radios. More on the Washington area at a later date.

SCOTT MENKE (IL-054) sends along the following:

On May 15 I attended the Armed Forces Day open house at O'Hare Airport . . . I did sit in a Marine UH-1 chopper long enough to copy some freqs . . .

382.8 Ground	340.2 Tower	360.2 Tower
337.4 Departure	269.5 Departure	290.2 Departure
302.6 Approach	353.9 Approach	363.8 Approach
289.4 Radar	345.2 Radar	315.6 Radar
308.4 Radar	255.4 Flight Svc.	264.2 Tac
341.3 Midway Tower	257.8 Civil. Tower	336.4 ? ? ?
384.9 Lake Front Cntr.		358.9 Squadron Cmd.

I have heard 255.4 in use by "Happy 37" calling "Voter 31" (apparently a base station). Also have copied a C-130 calling "Caldron" on 252.1 (Command Post, 928th Tact. Air Group at O'Hare).

The above mentioned Marine chopper also listed FM 32.45, 36.55, and 38.20.

Have also copied from the Glenview (IL) Naval Air Station:

140.025	Crash crews
140.075	Commanders Net (phone patches)
140.100	Ground Control

BOB TRIVALOS sends along the following to complete the U.S. Air Force at Mitchell Field, Milwaukee, Wisconsin:

128th Air Re-Fueling Group SAC (WI Air Nat'l Guard)
-UHF Presets -"UPSET CONTROL"- All Confirmed-

Ch	Freq.	Use
1	348.60	MKE Ground
2	325.80	MKE Tower
3	307.00	MKE Approach Control
4	255.40	Military FSS
5	291.80	AR
6	309.40	AR
7	351.20	Squad Operations
8	384.70	Maint. Control
9	311.00	SAC "Light Control" Primary
10	364.20	ADC/GCI

11	321.00	SAC "Light Control" Secondary Wurtsmith Command Post "
12	344.60	Sawyer METRO, AF WX
13	275.80	Ground Control
14	255.60	Sawyer Tower
15	259.30	Sawyer Approach
16	342.50	Wurtsmith METRO
17	289.60	Wurtsmith Tower
18	301.50	Wurtsmith Approach (Radar)
19	311.30	128th TCF "Brochure Control" Primary
20	360.60	CHI Control
	322.70	"Brochure Control" Secondary
	321.20	"Brochure Control" TAC/GCI

Additional AR: 235.1 238.9 318.1 266.5

440th Combat Support Group (AFRES) "SWEET"

1	236.60	AF Towers - Nationwide
2	363.80	FAA-AF Radar Approach
3	275.80	Ground Control
4	257.80	MKE Radar Approach FAA-AF Liaison
5	255.40	Military FSS
6	307.00	MKE Approach Control
7	307.30	
8	348.60	MKE Ground
9	251.10	
10	364.20	ADC/GCI
11	340.20	Navy Control Towers - Nationwide
12	351.20	Liaison with 128th
13	344.60	Sawyer METRO Volk Field
14	340.80	
15	259.40	
16	360.60	CHI Control
17	323.10	FAA ARTCC
18	381.30	TAC "Golden"
19	314.20	Squad Operations - Primary
20	372.20	Pilot - to - Dispatcher
	354.20	Squad Operations - Secondary

Thanks to both Bob and Scott for their excellent work in uncovering the above. Both report having excellent success with the technique of being observant when they visit places they wish to monitor and asking questions. I continue to urge all of you who want to begin in this interesting area of our listening hobby to look in the telephone book and search the government bands. In the "Yellow Pages" you may be amazed at what you might find listed under GOVERNMENT. And also in the alphabetical telephone directory look under "United States Government." Happy searching! If I can be of assistance in identifying something, feel free to ask. Please enclose a SASE, the freq. you're wondering about and any indication as to type of traffic you've heard. And, be patient, I'm away from home a lot and don't always carry my microfiche equipment along.

Speaking of searching, we'll close with the 162 - 174 MHz channeling plan. Although you may find an occasional frequency in use that doesn't fit the plan, most will.

Denny

4.3.7 Channeling Plan for Assignments in the Band 162-174 MHz

This plan shows the frequencies in the band 162-174 MHz to be used for assignments with authorized bandwidths of emission equal to or less than 16 kHz. Such assignments will not be authorized on other frequencies in this band except a) for the addition of a new station to an existing system that is authorized to use other frequencies and b) for the renewal or modification of existing assignments that are authorized on other frequencies. Government agencies should make plans to convert to the frequencies shown, all operations with bandwidths of emission equal to or less than 16 kHz.

162.025	163.000	164.006*	165.0125	166.000	167.000	168.000	169.000	170.000	171.000	172.000	173.000
.050	.025	.025	.0375	.025	.025	.025	.025	.025	.025	.025	.025
.075	.050	.050	.0625	.050	.050	.050	.050	.050	.050	.050	.050
.100	.075	.075	.0875	.075	.075	.075	.075	.075	.075	.075	.075
.125	.100	.100	.1125	.100	.100	.100	.100	.100	.100	.100	.100
.150	.125	.125	.1375	.125	.125	.125	.125	.125	.125	.125	.125
.175	.150	.150	.1625	.150	.150	.150	.150	.150	.150	.150	.150
.200	.175	.175	.1875	.175	.175	.175	.175	.175	.175	.175	.175
.225	.200	.200	.2125	.200	.194*	.200	.200	.200	.200	.200	.194*
.250	.225	.225	.2375	.225	.2125	.225	.225	.225	.219*	.225	
.275	.250	.250	.2625	.250	.2375	.250	.250	.250	.2375	.250	
.300	.275	.275	.2875	.275	.2625	.275	.275	.275	.2625	.275	
.325	.300	.300	.3125	.300	.2875	.300	.300	.300	.2875	.300	
.350	.325	.325	.3375	.325	.3125	.325	.325	.325	.3125	.325	
.375	.350	.350	.3625	.350	.3375	.350	.350	.350	.3375	.350	
.400	.375	.375	.3875	.375	.3625	.375	.375	.375	.3625	.375	
.425	.394*	.400	.4125	.400	.3875	.400	.400	.400	.3875	.400	
.450	.4125	.425	.4375	.419*	.4125	.425	.425	.425	.406*	.425	.4125
.475	.4375	.450	.4625	.4375	.4375	.450	.450	.450	.425	.450	.4375
.500	.4625	.475	.4875	.4625	.4625	.475	.475	.475	.450	.475	.4625
.525	.4875	.500	.5125	.4875	.4875	.500	.500	.500	.475	.500	.4875
.550	.5125	.525	.5375	.5125	.5125	.525	.525	.525	.500	.525	.5125
.575	.5375	.550	.5625	.5375	.5375	.550	.550	.550	.525	.550	.5375
.594*	.5625	.575	.5875	.5625	.5625	.575	.575	.575	.550	.575	.5625
.6125	.5875	.600	.6125	.5875	.5875	.600	.600	.600	.575	.600	.5875
.6375	.606*	.625	.6375	.6125	.6125	.625	.625	.625	.600	.625	.6125
.6625	.625	.650	.6625	.6375	.6375	.650	.650	.650	.625	.650	.6375
.6875	.650	.675	.6875	.656*	.6625	.675	.675	.675	.650	.675	.6625
.7125	.675	.700	.7125	.675	.6875	.700	.700	.700	.675	.700	.6875
.7375	.700	.725	.7375	.700	.7125	.725	.725	.725	.700	.725	.7125
.7625	.725	.750	.7625	.725	.7375	.750	.750	.750	.725	.750	.7375
.7875	.750	.775	.7875	.750	.7625	.775	.775	.775	.750	.775	.7625
.806*	.775	.800	.806*	.775	.7875	.800	.800	.800	.775	.800	.7875
.825	.794*	.825	.825	.800	.806*	.825	.825	.825	.800	.825	.8125
.850	.8125	.844*	.850	.825	.825	.850	.850	.850	.825	.850	.8375
.875	.8375	.8625	.875	.850	.850	.875	.875	.875	.850	.875	.8625
.900	.8625	.8875	.900	.875	.875	.900	.900	.900	.875	.900	.8875
.925	.8875	.9125	.925	.900	.900	.925	.925	.925	.900	.925	.9125
.950	.9125	.9375	.950	.925	.925	.950	.950	.950	.925	.950	.9375
.975	.9375	.9625	.975	.950	.950	.975	.975	.975	.950	.975	.9625
	.9625	.9875		.975	.975				.975		.9875
	.9875										

* See section 4.3.8

4.3.8 Channeling Plan for Splinter Channel Assignments in the Band 162-174 MHz

The frequencies shown in this plan are available for assignment to all Government agencies in accordance with allocation footnote G5 and as specified herein.

162.590625				162.596875
.803125				.809375 (2)
163.390625				163.396875 (2)
.603125				.609375
.790625				.796875
164.003125				164.009375
.840625				.846875
165.803125				165.809375
166.415625				166.421875
.653125				.659375
167.190625				167.196875
.803125				.809375
171.215625 (4)				171.221875 (4)
	171.2165 (5)		171.223 (6)	
171.403125 (4)		171.406 (7)		171.409375 (4)
173.190625 (4)		173.194 (7)		173.196875 (4)

Conditions for Use

1. A1, A2, F1, or F2 emission may be authorized. Use of voice (A3 or F3), except as provided by footnotes (5) and (6) for 171.2165 MHz and 171.223 MHz, will not be authorized except for maintenance support of the primary operation. Any authorized emission will be construed to permit use of voice for this purpose, provided such use does not exceed the authorized bandwidth.

2. Audio tone frequencies may be entered on applications in the CIRCUIT REMARKS field following the identifying code *AGN. Use of a continuous carrier with the associated tone may be indicated, including use of a continuous tone transmitted simultaneously only when other tones that carry the intelligence are transmitted. Examples: *AGN,450,475,625; *AGN,450,475C,625.

3. The technical standards applicable to the use of the splinter channels listed above are shown in paragraph 3 of Section 5.4.5.

4. Directional antennas shall be used where practicable on point-to-point circuits.

5. Prior to filing an application for a splinter channel, coordination shall be effected with any agency with adjacent channel assignments in the list of Frequency Assignments to Government Radio Stations.

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(2) Primarily for terrestrial telecommand and for stations with mean power greater than 50 watts for FM or with peak power greater than 100 watts for AM.
(3) (reserved)

(4) Available only when it is not technically feasible to use other frequencies.
(5) Available for 6A3 emission only.
(6) Available for 3A3 emission only.
(7) This frequency is available for operations requiring a bandwidth between 6 and 10 kHz, inclusive.

International

Richard Stein, Editor

This column is for reporting two-way communications frequencies above 30 MHz, radio system details, monitoring experiences, and any other information relating to monitoring in countries other than the United States and Canada. Send to: Richard Stein, 456 Barrymore Place, North Brunswick, NJ 08902.

We are continuing this month with our Mexican listings. I have just received additional listings from Mexico, and those should appear in this column in a couple of months.

158.450 R B-B, CFE. Long distance links covering several states with as many as four squelch tails. Audio good.

158.875 B-Repeater input for CFE Guadalajara-Tepic link

160.075 Simplex, B-M, construction business

160.350 R "Eco, S.A." Motorola Service Center XEJ-398
{HAVING THE CALL SIGN IS A MOST IMPRESSIVE CATCH AND HEARING IT IS A VERY RARE EVENT INDEED. I CAN ATTEST TO THAT. THE UTTERANCE OF CALL SIGNS SEEMS TO BE AKIN TO THE BIBLICAL PROHIBITION OF SPEAKING THE NAME OF THE LORD}

160.650 Simplex, B-M, unknown business activity

162.445 Simplex, B-M, unknown business activity

162.500 Simplex, B-M, unknown business activity with many units dispatched, prob. IMSS ambulancias.

162.800 Simplex, B-M, construction company

164.225 Simplex, B-M, mobile telephone service, operator assisted. Operator often leaves the channel 'up' after call is completed,blocking scanner for long periods of time. Also often misdials numbers requested by mobiles. Believed to be Radio Alert Company, which also has tone and voice paging services.

164.550 B-M, beer/soft drink delivery service, prob. "Casa Rubio" on Av. Tolsa.

164.780 Simplex, B-M, Casa Rubio, delivery service direction

165.400 Simplex, B-M, unknown police activity. Number codes.

166.000 Simplex, B-B, hourly reports on number of machines working. May be PEMEX (Petróleos Mexicanos)

167.090 B-M,"Central de Comunicacciones",pos. SARH or other gov't agency. Technicians test radios and antennas giving signal reports. Not interesting-no further traffic.

167.330 R B-B, message traffic to and from Guadalajara by unknown Federal agency. Unusual noises heard. Not RTTY nor digital. Given in short bursts between voice traffic.

167.780	Simplex, B-M, unknown business activity.
167.825	B-M, XEJ-2424, construction office to mobiles
168.630 R	B-B, B-M, SARH, long distance hourly reports on rainfall and items in storage. Not believed to be located in Guadalajara.
168.700	unknown activity.
170.330	Simplex, B to one mobile, a physician. Base is apparently his secretary.
170.680	Simplex, B to one mobile, similar to 170.330
170.825	Simplex, B-M, probably tow truck service
170.850	Simplex, B-M, trucking shipments of agricultural products
170.895	B-M, XEJ-471
171.025	Simplex, B-M, unknown business activity.
172.000	Simplex, B-B, probably Mexicana Aviación west office to central.
172.460	Simplex, B-M, unknown business activity
173.325	Simplex, B-M, M-M, local railroad yard
175.010	Broadcast relay to transmitter site, AM radio 675kHz
440.500 R	Base is '400'
445.500	B, one-way conversations in Spanish- intermod?,business type activity.
446.500	B, same as 445.500
510.312	B-M, XEJ-679 calling XEJ-680. The only non-amateur station that IDs! May be image, but transmissions are too short and infrequent to determine without two scanners and/or a analyzer. Business type activity.

ווילי -המידע הזה הוא טוב מאד-עוד פעם -תודה רבה וכל הכבוד-ריקי

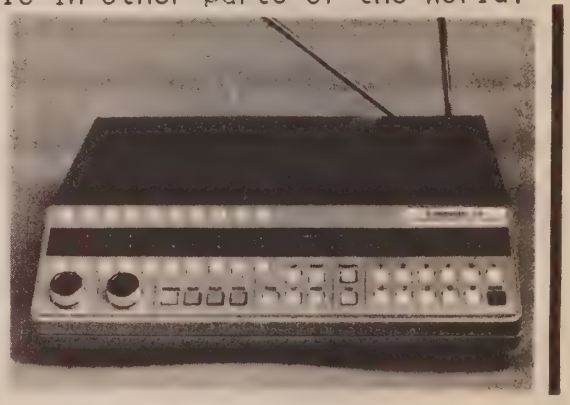
Here's another scanner from the United Kingdom. Thought you might like to see some of the equipment available in other parts of the world.

328 FM SCANNING MONITOR

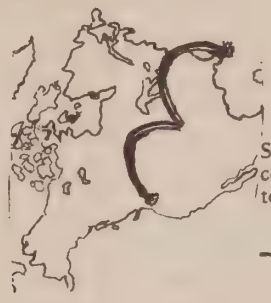
A tailor made, no compromise unit designed for the UK market. Covers 55-88, 144-174 and 400-470 MHz in 12.5 KHz steps. Features include:- Frequency synthesis with continuous display of active channel. 2 speed scan with priority and channel lockout. 20 memory channels. Auxilliary equipment control. Block frequency search option between programmable limits. Mains or battery operation. Vehicle mount provided.

Acclaimed by the "Snoopers" of Britain as the BEST

PRICE: £198.00 inc VAT (Carr and packing £3.00)



Until next month, שלום



LOW BAND SKIP

MIKE BRITT, EDITOR

Send reports of distant stations received on the 30-50 MHz Band, as well as: information; comments; suggestions; question; and any items of interest regarding Low Band Dxing to:

Mike Britt, 14631 Yorba Street, Tustin, CA 92680.

Greetings!

Hope you have been favored with as much propagation activity as I have been over the last few months. As I write this column (first part of June here in newsletter land), "sporadic E" skip is quite active. Some nasty weather in the Plains states has produced some exciting listening here in southern California.

I have a number of things to cover this month, including more information on some topics which seem to be establishing themselves as regular features in this column. These include the foreign skip (it seems Argentina is also responsible for the Spanish pagers on 35MHz.), more "midnight skip", and another interesting "two-way"skip involving repeaters.

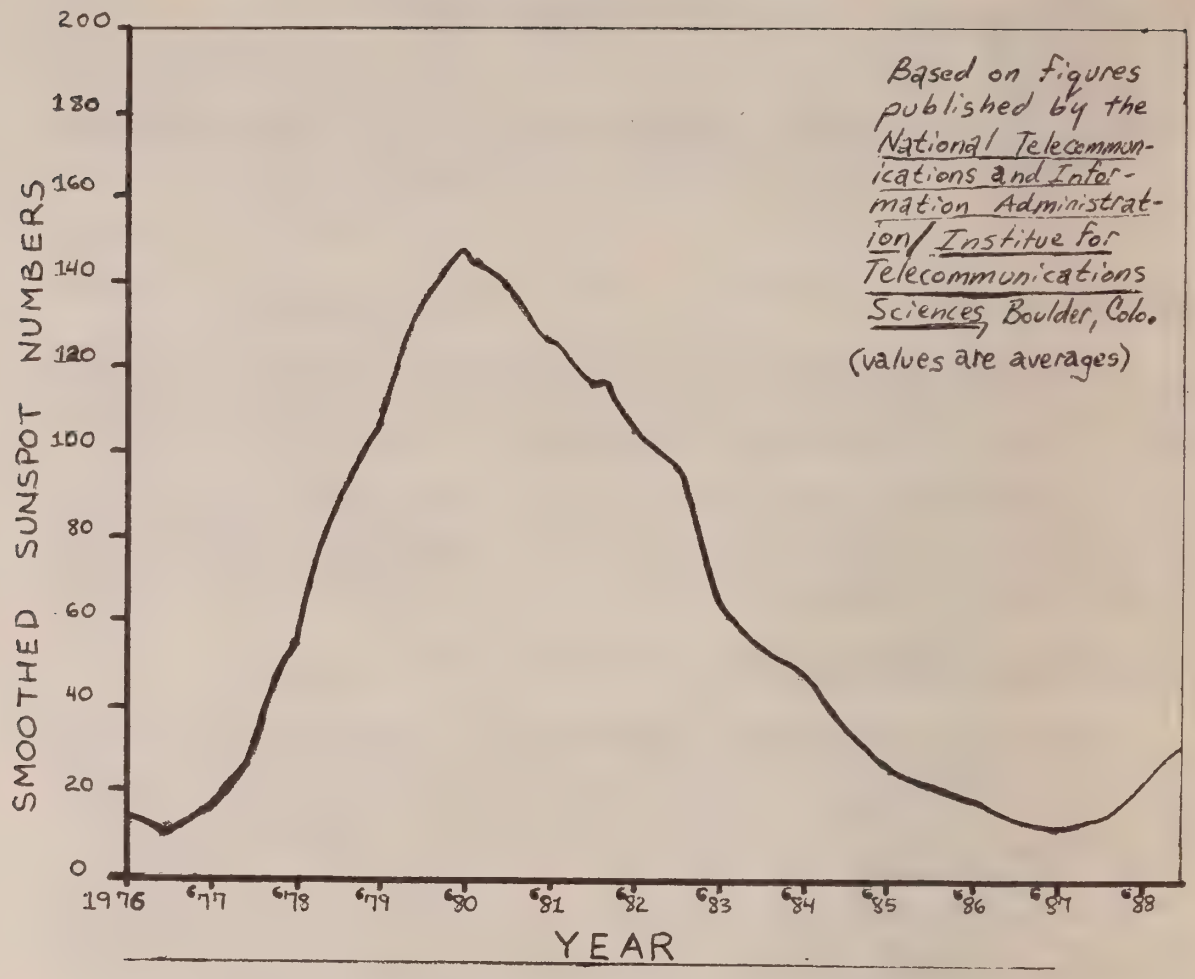
THE SUNSPOT CYCLE AND "F-2" SKIP

As the end of the 21st sunspot cycle slowly nears, there will be less and less "F-2" skip on the frequencies above 30MHz. The current level of sunspot activity is approximately the same as that of the latter portion of 1978 (give or take a few solar eruptions). The chart on the next page shows the smoothed sunspot numbers for the current cycle, which began in 1976. The values for the future are predicted figures, and are averages between the maximum and minimum levels of confidence.

As the chart indicates, sunspot activity will level-out sometime between late 1985 and early 1987, the latter year being the predicted period in which the 22nd sunspot cycle will begin. Incidentally, the cycles are numbered from the time they were first observed by man, and do not in fact indicate how many 11 year cycles have actually occurred (which is another mystery of the universe). The conclusion which can be drawn from these predicted levels of solar activity is that "F-2" layer skip will all but disappear in the next year or so from the frequencies above 30MHz. The 2,000 plus mile propagation which is produced by the ionization of the F-2 layer of the atmosphere is dependent on a high level of solar activity. As the sunspot activity decreases, so does the level of ionization which occurs in the F-2 layer. As the level of ionization decreases, so does the maximum usable frequency (MUF),

which is defined as that frequency at which the ionosphere will return signals to the earth for 50% of the days in a given month. The more ionized the atmosphere becomes the higher the MUF will be. As the MUF of the F-2 layer decreases, so does the amount of "F-2" skip. As the "F-2" skip decreases, you and I must be satisfied with "sporadic E" and other types of propagation to produce Dx signals on the frequencies above 30MHz.

Of corse, there are those who look forward to the termination of sunspot related skip, including a number of public service agencies, who will once again be able to communicate with their own units. In a recent edition of CB Radio Times, a man wrote saying: "I regularly listen to our highway patrol on 42MHz. During the day I also pick up stations from California coming in on the same Frequncy. Is there any way to eliminate this annoying skip in my scanner?" Well, when read this I thought to myself, "this guy has to be kidding!" Where is his sense of adventure? Here is a person which has just alienated any true Dxer. The solution to his problem is simply to take a pair of wire cutters and snip the coax to the antenna...and leave it that way. If this doesn't result in minimal reception, he might try snapping his whip antenna in half. But seriously, skip can and has been a major problem for a number of public service agencies who operate on the low band.



SUNSPOT CYCLE Nº 21

- Current cycle began in June of 1976 and reached its peak in 1980.
- Cycle 22 predicted to begin in 1987.
- The correlation between sunspot numbers and ionospheric propagation conditions is not direct, however, smoothed sunspot numbers are generally a good indication of the upper atmosphere's state of ionization, and therefore, the ability of the F-2 layer to reflect radio waves (causing long distance skip).

REPEATER "FREAK"QUENCIES

All it took was some strong "sporadic E" skip to bring about another unusual "two way" skip involving repeaters on Sunday, 6/6/82. As I listened to the Kansas Highway Patrol on 44.94 MHz, the background sirens of a pursuit caught my attention. I was all set to hear an exciting chase through the open county of Kansas, when I was quite shocked to hear the pursuing units state they were approaching the San Bernardino Freeway!

This was shortly after 17:00 PDT, and with some careful and deliberate listening, I was able to establish, within a matter of minutes, that I was hearing units

of the Los Angeles County Sheriff's Department, which are assigned to the City of Industry and San Dimas sheriff stations. The L.A. Co. Sheriff's Dept. currently operates on 39 Mhz with two-frequency channel assignments (base on one freq., mobiles on another). So how is it that I was hearing on 44.94 Mhz, mobile units which operate on 39.46? A little research into the frequencies assigned to the K.H.P. was required to find the answer.

It seems that the Kansas Highway Patrol got the idea to use a repeater net with an input freq. of 39.46 (The same freq. used by the Industry and San Dimas LACoSo units!). The output for this repeater is the base freq. of 44.94. What happened is obvious: the LACoSo transmissions skipped to Kansas, where they were accepted by the repeater, and promptly rebroadcast over the K.H.P. freq. of 44.94. This new signal then skipped back to California, where I received it on my scanner.

It would appear that this type of skip involving repeaters is not at all uncommon. I have heard such skip on a number of occasions. One would think that these agencies would have their repeaters guarded to prevent such occurences, but they apparently do not.

SKIP AT MIDNIGHT

When I last heard night skip, I failed to check out the most obvious possible cause, which is the weather. Since I wrote my July column, I have heard this late night skip on two separate occasions. This time I took the opportunity to investigate the condition of the atmosphere, and I am no longer in the dark, so to speak. [By the way, I should define "night skip" as skip which is being heard after night has fallen in both the region it is being broadcast from and the region in which the skip is being received. It is not unusual for the Western U.S. to receive skip from the East after the sun has gone down in the East. (states, that is, we all know that the sun goes down in the west, unless you live on the North Pole, where the sun doesn,t set for half the year...must be interesting skip reception up there)].

Back on the subject, on Saturday, May 15, 1982, from 21:30 PDT until sometime in the morning of the next day, May 16, strong skip from central Texas was received here in southern Calif. At 23:00 hours on the 15th, I took a break from monitoring this propagation to take in the weather segment of one of the local 11 o'clock news programs. The report was more than I had hoped for...a front running from central Texas up to Illinois, with cold, moist air coming in from the Gulf of Mexico. This was being overrun by cold, moist air from the north and west. This is a perfect set-up for tornados! Tornados had and were continuing to occur in this region. The inversion conditions which are associated with the storm conditions which produce tornados are also the ideal conditions for skip. As the cold air from the northwest sinks, the warm air from the Gulf rises in patches. Highly irregular atmospheric conditions are produced, and the ionization amounts may be changed to a perfect skip producing level.

The bottom line on this midnight propagation is that it is nothing more than tropospheric skip, commonly produced by teperature inversions. In addition to the tornado and violent storm producing weather, other conditions which are ideal for "tropospheric bending" are fog and smog. Both of these are related to inversion conditions. As warm, offshore breezes of the daytime reverse at sunset, cool air blows in from the sea. This temperature inversion condition is common along the Atlantic, Gulf, and Pacific coasts, and is almost certain to produce some tropo. skip.

Tropospheric skip, in my opinion, is the next best thing to the F-2 skip that is caused by sunspot activity. Probably the best charactoristic of tropo propagation is that it produces signals which are usually quite steady, and often very strong and clear. In addition, this type of skip may last several hours, and may well go into the late night or early morning hours, as did the skip I received on the 15th of May. As this skip travels only half the distance of the F-2 skip, those of you who live in the north central portion of the U.S. are at an advantage, as you should have good reception from all three coastal regions.

The best part is that tropo skip is quite easy to predict. It is simply a matter of listening to the weather reports, and checking the weather maps in your newspaper. If you live on the coast, be sure to keep an eye on "tornado alley", the region where the funnel clouds occur most often.

An interesting side note to all of this, the effect of temperature inversions increases with frequency. FM and TV DXers love this type of propagation. Inversion layers also produce some interesting VHF and UHF propagation, as the U.S. Forest Service will testify to.

The skip I received from Texas on 5/15/82 was strong on the frequencies above 37MHz, notebly the 46MHz fire freq's. Benbrook, Texas, FD was recieved on 46.06 at 21:39 PDT ("...a car on fire, at the Ridgely County Club Road, it's under the bridge at 183..."). A check with dispatchers of the local Orange County, Ca. 46MHz fire nets revealed that skip was strong on most of the 11 frequencies used in the county. By midnight, I'd had enough, but before retiring, I finished off the cassette recording of the activity with, "2 a.m., KECC518, Taylor County Sheriff's Department," on 37.18MHz, at 0:00 (2¼:00, if you prefer) PDT. (The call sign indicates this would be a rather recent liscense for Taylor Co., Texas.

ARGENTINA ON 35MHz?

Last month, I discussed the Argentine pager skips which have been received on 32.68, 32.82, and 32.96. I now beleive that some of the Spanish pagers I am hearing on 35MHz freq's. are also from Argentina. The frequencies are 35.08, 35.28, and 35.32.

I base my conclusion that the 35Mhz skips are from the same region as the 32MHz skips on a number of factors. First is the fact that skip is in on the 35MHz freq's. during the same periods that it is in strong on the 32MHz ones. Secondly, the format of the pagers is the same on all six of these frequencies. Each transmission is preceeded by a pager tone, and all broadcasts are of a medical service nature.

Something interesting I have just recently discovered is that these broadcasts are of recordings! To explain this in more detail; each message is repeated immediatly after it is first broadcast. In studing the tapes I have made of these broadcasts, I have discovered that every element of the initial transmission is identical to that in the repeated broadcast which follows - down to the sneezes and other noises from the background. I am not certain if all of the broadcast is on tape, or if the first transmission is put on a cartridge and immediately replayed over the air. Whatever the case may be, the repeat message is unmistakably a recording of the first, as phrasing and pauses are identical, and background noise occurs at the same point as in the first message.

I have been brushing up on my Spanish, in order to do a decent job of translating these South American skips. I also did a little research into the various accents of the Spanish language, the origins and charactoristics of various regions, and words unique to the regions of Latin America.

If you are familiar with the Spanish Language, and if you have heard the skips from Argentina, you may have noted that the accents of these Spanish speakers are recognizably those of the Castilian dialect common to the southern coastal region of South America. Just as there are major differences between the English of Great Britian and the English of America, there is a big difference between the Spanish of Spain and the Spanish of America. Additionally, there are major regional differences on each continent. A person from Chile might have as much trouble understanding a person from Brazil as someone from New York would have understanding someone from the deep South of the U.S.

A phrase I have heard on 32.68, 32.82, 35.08, and 35.32 is "a Centrál". On 32.68: "llame a Centrál"; 32.82, and 35.08 make the same request which I would guess is asking the pagee to "call Central" which might be a central telephone exchange. The variation on 35.32 is: "mensaje a (telephone#) en a Centrál". This translates: "you have a message (mensaje, pronounced MENSAWKAY) at (a telephone number) at Central". Also common to most of the six freq's. are "Sanitario Modelo" and "Clinica San Roque".

Last month I mentioned the distance from California to Argentina, and when rereading the copy - after I had sent the original in to be pasted up - I was shocked to discover some rather strange figures which I had typed as distances. I don't know how those got in there, but the correct distance from Calif. to Argentina is some 5,000 to 6,000 miles. If the correction didn't make it into the newsletter, then it now stands corrected.

FROM THE ERROR DEPARTMENT

A few mistakes (other than the usual typos) have managed to slip by my proof-readers (myself and whoever else I can grab) thus far. You will note that I no longer have an eight digit zip code, as the typesetter had previously given me. Referring back to my June column, in the list of foreign skip freq's., the "Mexico" after 32.68 should have been "medico" - the origin, as we now know is from Argentina. The image for 33.52 is listed wrong. This image should be 32.96, not 33.08 as listed. This signal is distinctly different than the actual 32.96 pager skips from Argentina. Left out of this list was 33.76, which is a two-way conversational transmission in Spanish. The 10.8 IF image for 33.76 is 33.08.

THERE IS NO CLAY IN CLAY COUNTY (33.86)

If you were to say "Pike County" real fast three times, add a lot of static, and skip it from Pennslyvania on 33.86, you might think the dispatcher was saying "Clay County". At least, that's what must of happened in my case. If you've been searching for a Clay County on 33.86, you can forget it. (All that work I did, oh well). The correct ID is "Pike County Communications Center", which I still can't find listed anywhere, but I now know is Pike County, Pennslyvannia.

I happened to catch a radio test being done by this dispatch, and by tracing the call signs of the VFDs, made a positive ID on the location. The call sign for the "Pike County Fire Radio System" is KGD867 (or KGG, or KGT, ??).

My thanks to those who took an interest in this Clay business. Wes Haworth (WA-032) went so far as to match up the states authorized on 33.86 with those which have Clay Counties. Thanks anyway. This goes to prove that call signs are your best bet for an ID...if you can understand the call sign as some dispatchers whip it out.

FIRE DISPATCHES

33.90 MHz

UNITED STATES

by region

STATE	AGENCY/AREA SERVED/ NOTES	FCC CALL	ID	CHANNEL	OTHER
WESTERN STATES					
CALIFORNIA	Los Angeles City FD Note: Radio Dispatches on 33.70 and 33.82. Fireground & rescue now on UHF.	KDG872	"O.C.D."	Channel 9	Back-up channel Seldom used
WASHINGTON	Seattle FD	KOA748 KFD671			Seattle FD now using UHF
ROCKY MOUNTAIN STATES					
NONE					
MIDWESTERN STATES					
ILLINOIS	Carthage FD	KSI575			
OHIO	Cleveland FD	KQA216	"KQA216, F-1, dispatch Cleveland, Ohio"		Repeater

33.90 MHz Fire Dispatches (cont'd)

STATE	AGENCY/AREA SERVED/ NOTES	FCC CALL	ID	CHANNEL	OTHER
OHIO	Hamilton County Fire Communications (Cincinnatti) (Dispatch for VFDs in suburban area)	KQI316	"KQI316"	F-1, dispatch	Repeater
	Note: alfa-numeric unit designators. Eg: "1-David-91", "2-Henery-41", "3-Linclon-81", "1-Nora-11", etc.				
OHIO	Aberdeen VFD	WSC478	"Aberdeen"		
OHIO	Beallsville VFD	WZY494	"Bealsville Fire Control"		
OHIO	Byersville VFD	KTP896	"Byersville"		
OHIO	Bloom Township VFD	KJK868	"Bloom Township Fire Dept."	F-2	
OHIO	Caldwell VFD (Nobel County)	KDU398	"Caldwell Base"		
OHIO	Cassel Station VFD	KXV526			
OHIO	Hamilton Township VFD	KBP796	"Hamilton Township"	F-2 (F-1 is 33.86)	
OHIO	Lore City FD	WXK781			
OHIO	Monroe County Fire and rescue dispatch	KZM827	"Monroe County"		
OHIO	Madison Township FD	KAY990	"Madison Township"	F-1	
OHIO	New Concord Village FD	KDP445		F-2 (F-1 is 33.98)	
OHIO	Old Washington VFD	KYU797		F-1	
OHIO	Pleasant City VFD	KVH229			
OHIO	Quaker City VFD	KTB305			
OHIO	Ripley VFD	KCT346	"Ripley base"		
OHIO	Somerton VFD	KFR376	"Somerton"	F-2 (F-1 is 33.94)	

Note: Ohio FDs use the following format when they ID on the hour: Call sign, followed by name of dept., "radio and time check", and the time. Example: (or similar phrase)

"KAY990, Madison Township Fire Department, radio and time check: 15:00 hours."

SOUTHERN STATES

LOUISIANA	Opelousas Hope Hook and Ladder Co.	KKG520 KKS504 KKS505	
LOUISIANA	Raceland Vol. Fire Co.	KJR251 KGL475 KBZ998	
SOUTH CAROLINA	Goose Creek Rural VFD	KFQ898	
SOUTH CAROLINA	Sumter FD	KDJ554	
TEXAS	Greenville FD	KKU451	
TEXAS	Pondersa VFD	KCP423	
WEST VIRGINIA	Martinsburg Fire Board (Central dispatch for Berkeley County VFDs): - Martinsburg FD (KBR226) - Back Creek Valley VFD (KYF445) - Baker Heights VFD (KDA633) - Hedgesville VFD & Rescue (KBP749) - South Berkeley VFD (KDN464)	KBR226	"Fire Board"	Dispatch IDs such as: "All South Berkeley Monitors..." etc.	

MIDDLE EASTERN STATES

DELAWARE	Hockessin Fire Co.	KGE335

MARYLAND — Talbolt County Central Fire Dispatch (Central dispatch for Talbot Couty VFDs)* — KRG767 "KRG767" KGC552 — F-1, dispatch

NEW YORK — Broom County Fire Control (County control for FDs) — KKL522 "Broom County"/ "Fire Control" — F-1, dispatch
- Port Crane Dispatch (Central dispatch, VFDs)* — KRZ270 "KRZ270" — Dispatch alerts such as: "All Chenango Bridge Firemen..."

Note: unit designators such as: "33-4" (Engine), "36-1"(Eng.) "Ambulance 47-B", etc.

NEW YORK — Warren County Fire Control (Central dispatch for VFDs)* — KCK671 "Fire Control" (ID not to be confused with Broom Co.) — F-1, dispatch

Note: unit designators such as: "B-244", "C-274", "E-354", "E-T-347", "R-U-120", "67-A"(Amb), etc.

PENNSLYVANIA — Chester County Emergency Services (Central dispatch for all VFDs)* — KJY884 "Chester County" — F-1, dispatch

Note: •Dispatch alerts preceeded by quick call and beeping pager tone.
•Dispatch format such as this: "Station 41 Ambulance; The A&P Supermarket; 1852 E. Linclon Highway; Colwyn Township: an injured person."
•Fire alerts may be repeated on 33.88; Rescue alerts may be repeated on 33.86 (Rescue channel).

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*Indicates that all VFDs are not listed here, as they are numerous. However, they may be heard to ID separately from Dispatchs on some occasions.

PENNSLYVANIA — Lancaster County Fire (Central dispatch for VFDs)* — KGC755 "755" "Lancaster County" — F-1, dispatch

Note: Unit IDs such as: "Ambulance 21-A-1;"Rescue 48 - Gardenville Ambulance"; "East Lampeter Ambulance"; etc.

PENNSLYVANIA — Lebanon County Fire Communications (Central dispatch for Lebanon City FD and Lebanon Co. VFDs)* — KGH 770 "770" "Lebanon County" — F-1, dispatch

Note: "770" charactoristic terms:
- "770 to station(#)..." "...dispatchers (#)and(#)on duty."
- "...contact the fire radio..."
- "...contact the fire board..."(not to be confused with W.Va.)
- "770; city fire department, the following apparatus are listed as being out of service: ..."
- "770; county fire departments, the following apparatus are listed as being out of service: ..."
- "city" alerts: "box alarm" tones (lengthy series of tones, pitch varing only small amount. Similar to tones used by Boston, Mass. FD on 33.74)

PENNSLYVANIA — York County Fire (Central dispatch for VFDs)* — KRE417 "York" — F-1, dispatch

Note: Dispatch alerts preceeded by three consecutive tones of same pitch. "York to station(#)..."
Unit IDs such as: "Ambulance 57-2", "Medic 102"
Rescue alerting on 33.86

PENNSLYVANIA	Dauphin County Fire (Central dispatch for VFDs)*	KGC663	"Dauphin County"	F-1, dispatch
PENNSLYVANIA	Ephrata Borough FD (Regional dispatch for area VFDs - located in Lancaster County)*	KUG740	"740"	F-1, dispatch
PENNSLYVANIA	Springetts Fire Co. (York, Pa.) (Regional dispatch for area VFDs - located in York County)*	KGP775	"775"	F-1, dispatch

* Indicates that all VFDs controlled by these dispatches are not listed here, as they are numerous.

CONTINUED NEXT MONTH!! - In the September newsletter, FDs and regional dispatches on 33.90 MHz located in the New England states...including "Lakes Region" in New Hampshire, and the mutual aid systems of eastern Connecticut. Also Massachusetts and Maine.

photo department

Send photographs of custom monitor listening posts, unusual or extensive monitor or two-way antenna systems, user station consoles (PD, Fire, Paramedics, etc.) or other monitor/two-way related equipment of interest. Photographs must be 3 x 5 inches or larger, black-and-white with good contrast, sharply focused and attractively composed. Each photo must be accompanied by details and explanations of equipment. Photos will not be returned. If you have questions, write first and please include an SASE. Send photos or write to:

Well, we didn't get a new editor for the Photo column in time for this issue, but I'm almost positive that one will be in place for September. Hopefully, this will be the last time I will be filling in!

I'm beginning with a "Corrections Corner;" Chuck (IL-141), a contributor to this column in the May issue, writes to tell us that the article should have read, "From the Shawnee Ridge in Southern Illinois comes the system of Chuck (IL-141)." He adds, "I hope no one thought I was trying to be deceptive by sending in a false ID number and a non-existant town!"

Chuck also notes that the copy at the bottom of the page (33) should have said that cavity filters are <u>expensive</u>, not <u>large</u>.

"I'd gladly convert my attice into a tuned cavity if it would rid me of the local TV station's RFI."

He continues, "Although two or more RF notch filters can be used on one monitor, they cannot be tuned to the same frequency.

Photo of UHF-TV antenna before being mounted atop the Shawnee Ridge. Channel is 27,WDDO. The local weather station is also located on this tower—162.425 MHz.

Only if the notches are isolated by, say, placing one of either side of a preamp, can both filters be identically tuned.

Finally, Chuck includes a photo (previous page) and the information that the Shawnee Ridge is a sandstone uplift running east to west accross Southern Illinois from the Ohio River to the Mississippi. This ridge is much higher than the surrounding terrain, making it an ideal site for an antenna system. Unfortunately, many commercial enterprises have gotten the same idea, and the ridge is bristling with repeaters, TV & FM stations, and the like.

Thanks, Chuck.

AUKLAND, NEW ZEALAND is the home of RCHA member Charles (NZ&L-001). He sends a photograph entitled "The mobile shack," accompanied by a description of its contents, and his his best wishes.

Top, from left: FRG-7700M - FRT-7700 - FRV-7700A NORDENDE combination VDU/TV on top of TONO-350.

Center row: SABA CR-336 Cassette recorder, EURO-Pilot handheld AIR/MW receiver in front of revolving World-shadow unit (adjustable for 12 months), 230/13.8 DC power-unit for TONO.

Bottom row: Cassettes, report forms, radio/-RTTY guides, etc.

On wall: Graphic presentation of 5 - 30 MHz spectrum showing frequency allocations, together with ARINC in-flight frequency World map.

Main antenna used at this QTH (36,59°s. Lat, 174,52° E. Long.) is a 21' whip.

The headphones used are lightweight YAESU YH-77.

Thank you, Charles.

VHF Marine

Send information, articles, frequencies and their use, and questions that relate to private, commercial, and Coast Guard VHF maritime and inland waterways radio communications to:

EDITOR WANTED!

Public Safety

This column is for reporting Public Safety and Special Emergency frequency information, radio system details, radio codes, dispatch areas, unit numbering systems, etc. for police; sheriff, fire, forestry (except USFS), fish and game, highway patrol, state police, prisons, prisoner work camps, local government, highway & street maintenance, port authority/bridge maintenance, animal control, ambulances, paramedics, hospitals, life guards, ski patrol, search & rescue, flood control, civil defense and disaster organizations. Input and questions for this column must be sent to the proper regional Public Safety editor listed below.

PUBLIC SAFETY - CALIFORNIA

Send Public Safety and Special Emergency frequencies, radio system details and questions to:

Public Safety, California, P.O. Box 3962, Santa Fe Springs, CA 90670-1962

WELCOME TO THE AUGUST 1982 ISSUE OF RCMA PUBLIC SAFETY-CALIFORNIA

From GERRY (CA-SL-005) a correction to May column. Ventura CHP link is on 154.695 not 155.695. 155.445 repeats 42.16 mobile with a continuous tone. (A 2 khz PL?)
Arroyo Grande City Fire Dept. has switched to 154.01.

From WILLIAM (CA-LA-464): Several of the L.A. Co. Sheriff's Mountain Patrol and Search and Rescue units are equipped with U.S. Forest Service radio frequencies on 171.575 and 169.95.

From TOM (CA-LA-475): The RTD Transit Police use 453.625. Beverly Hills P.D. use 453.65 as their secondary channel. Ch. 1 is 453.525. The L.A. Airport Police are on 460.525 and use the same codes and abbreviations as L.A.P.D.

From Scanning JIM in Culver City (CA-LA-374): With his PRO 2001 he listens to the following and would like others in the west side to send in their listings.

156.09	Culver City P.D.
154.415	Culver City Fire Dept.
154.92	Culver City P.D. Tac 2
466.30	Clark Plumbing
472.2375	Rotor Rooter
152.03	Mobile Phones
454.40	Mobile Phones

From TIM CA-OR-229); The J.P.L. Ham Club has been and hopefully will continue to relay the Space Shuttle communications on 145.60. If you can't pick it up, try image frequency or by scanning the hambands. This broadcast has been relayed as far as Salt Lake City. There are long periods of silence due to no shuttle contact, but don't give up easily on this excellent listening. Other frequencies: 145.46; 146.00; 146.175; 224.04; 446.70; 447.775 and many others.

From Masco 1981 Annual Report, the parent company of Electra, which manufactures Bearcat Scanners, is this information: From a market under $10,000,000 at the beginning of the 1970's, the industry has grown over tenfold. Electra's share of market, over 50 percent, continues to exceed that of its two nearest competitors combined. Last year, sales declined 20 percent to $57,000,000 from $71,000,000 in 1980. The economic recession and the surge of the home video game market intensified the competition for consumer discretionary spending-particularly for higher priced items such as scanners-interrupting Electra's historic pattern of growth.

Last year was a disappointment for our sales of personal communications products. Scanners have penetrated less than 10 percent of all households (a modest penetration for successful consumer products) and our new product horizons continue to expand.
Looking to the future, however, our outlook is more positive.

From ERIC (CA-LA-045): San Diego P.D. will add a sixth dispatch channel and will use part of its present inquiry freq. for duplexing. Future freq. for inquiry is 158.91 with a call sign of KNBF384. Changeover date is 1983.

The CHP Silver channel may split soon to Tan. Newhall, Lancaster, and Tejon are involved. Receiver and transmitter sites are too close frequency wise to the Blue channel which is often used in these areas due to the mountainous terrain.

From STEVE (CA-SD-011): Ref. last months info on Knott's Berry Farm, correct call sign is KML654. Also, here are additions to Sea World;

154.515	WYJ287	F1 Security
154.54	WYJ287	F2 Operations
154.54	KGM444	Hub S/W Research Institute
42.96	KSW418	Paging
35.72	KVN312	Hydrofoil Boats/Skytower
171.05		Killer Whale Show Wireless
453.20 R		F1 Wild Animal Park Security/Park Operations
453.80 B		F2 Wild Animal Park Monorail "Simba Cr."

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151.805	WYA936	Marineland
151.685	WXM831	Marineland
152.90	KWL760	Universal Studios
152.93	KMK699	Universal Studios
464.4625		Disneyland (unknown usage)
464.5125		Disneyland (unknown usage)
462.575		Disneyland (unknown usage)
461.4375	KC5971	Magic Mountain
154.60	KP2843	Magic Mountain
154.54	KY7426	Magic Mountain
464.775		Queen Mary Security
464.375		Queen Mary Operations
151.895		San Diego Zoo Security
464.875	KBN784	Lion Country Safari
463.95		Anaheim Stadium and Convention Center 453.95
154.60		Disneyland Security
154.57		Disneyland Maintenance
154.625		Disneyland Paging 462.575 SEC.
464.575		Disneyland Hotel
42.98		Disneyland Rides
151.625		Movieland Wax Museum Security
151.655	KML654	Knott's Berry Farm Security
151.625		Knott's Berry Farm Maintenance
154.57		Knott's Berry Farm Rides Maintenance
464.55		Knott's Berry Farm Entertainment

464.825 Knott's Berry Farm Marketing
158.46 Knott's Berry Farm Paging

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From MIKE (IDAHO-001): Last month, Roy (CA-OR-???) was looking for Irvine Company frequencies used at Fashion Island in Newport Beach.
Ch. 1 461.90
Ch. 2 461.825 KDD30
154.515 WYT955 Fashion Island Merchants

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From NEAL (CA-LA-385): Here are some new freqs...

155.175 Mauran Ambulance--in the city of San Fernando
453.825 Los Angeles Co. Public Buildings and Radio repair
453.975 Los Angeles Co. Public Buildinga and Radio repair

I searched for the Mauran freq. for about two days before I was able to confirm it. They have been in business for about a year or so. They operate out of the old San Fernando city fire station on 1st street. A sign inside the station house reads "San Fernando Search and Rescue." What's the connection?

The L.A. CO. freqs. are from Police Call Vol. 9 1982., and have no designation.

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UNITED STATES FOREST SERVICE
RADIO SYSTEM

Boise Interagency Fire Center

168.05	TAC 1
168.20	TAC 2
168.60	TAC 3
168.70	COMMAND 1 /170.975
168.10	COMMAND 2 /170.45
168.075	COMMAND 3 /170.425
168.625	NATIONAL AIR CH.
166.675	AIR TACTICS 1
169.15	AIR TACTICS 2
169.20	AIR TACTICS 3
170.00	AIR TACTICS 4
414.65	LOGISTICS 1 /410.775
415.40	LOGISTICS 2
415.50	LOGISTICS 3

Bureau of Land Management

166.4875	Riverside /167.075
166.375	Bakersfield
167.00	415.075 Car to Car F5
168.55	Airnet 415.15 408.775
415.15	166.4875 166.375
167.95	Air to Ground
166.725	Fire Equipment
166.775	Fire Equipment
168.475	Fire Equipment
169.75	Fire Equipment
408.625	415.075 Box Springs
408.575	Baker, Blue Ridge
419.675	Breckinridge
408.775	415.15

National Parks

170.075	Lassen Park, PAT 166.675
170.05	Point Reyes, PAT -
171.75	Sequoia-Kings, PAT 169.15
164.75	Sequoia-Kings, PAT 169.15
172.65	Yosemite-Kings, PAT 169.15
171.80	Yosemite-Kings, PAT 169.15

Region 5

169.925/170.525 Statewide Command
415.525 South Zone Dispatch
166.5625 Santiago
164.9125 Frazier
168.625 Airnet
415.55 Airnet

Angeles National Forest

171.575/172.375

415.225	Lukens
415.325	Johnstone
169.95	Fire Net F3
168.60	Dozer Net F7
169.20	PAT*

Cleveland National Forest

168.75/170.50

415.45	Los Pinetos
415.425	Boucher
168.15	Administrative
415.275	Santiago
166.675	PAT*

San Bernardino National Forest

171.475/172.225

415.475	Keller
415.575	Pine Cove
164.125	Service Channel
415.35	Keller
169.15	PAT*

*Pre-Assigned Air Tactics Channel

(This is a corrected list to last months)

CALIFORNIA DEPARTMENT OF FORESTRY
GERRY (CA-SL-005)

UNIT LOCATION	REPEATER & CAR-TO-CAR	CONTROL & MOBILES	AIR NET	COMMAND CENTER
REGION & LOCAL NETS				
REGION I - NORTH COAST	151.385	159.270		RO-1
1100 Mendocino	151.190	159.225	Yellow	Howard Forest
1200 Humboldt-Del Norte	151.250	159.405	Yellow	Fortuna
1300 Lake-Colusa-Napa-Yolo-Solano	151.340	159.315	Yellow	St. Helena
1400 Sonoma	151.460	159.390	Yellow	Santa Rosa
REGION II - SIERRA CASCADE	151.325	159.360		RO-2
2100 Butte	151.400	159.375	Green	Oroville
2200 Lassen-Modoc	151.190	159.390	Blue	Susanville
2300 Nevada-Yuba-Placer	151.250	159.405	Blue	Auburn
2400 Shasta-Trinity	151.160	159.270	Green	Redding
2500 Tehama-Glenn	151.370	159.285	Green	Red Bluff
2600 Siskiyou	151.250	159.330	Blue	Yreka
REGION IV - SOUTH SIERRA	151.265	159.330		RO-4
4100 Tulare	151.190	159.225	Yellow	Visalia
4200 Mariposa-Madera-Merced	151.460	159.360	Yellow	Mariposa
4300 Fresno-Kings	151.385	159.270	Yellow	Sanger
4400 Calaveras-Tuolumne	151.175	159.450	Blue	San Andreas
4500 El Dorado-Amador	151.190	159.225	Blue	Danaher
4600-4659 Kern County Equipment			Yellow	
4660-4699 Calaveras-Tuolumne County Equipment				
4900 Fresno-Kings County Equipment				
REGION V - CENTRAL COAST	151.445	159.345		RO-5
5100 Monterey-San Benito	151.250	159.405	Green	King City
Monterey (south)			Blue	
5200 San Mateo-Santa Cruz	151.370	159.315	Green	Felton
5300 San Luis Obispo	151.325	159.315	Blue	San Luis
5400 Santa Clara	151.400	159.375	Green	Morgan Hill
REGION VI - SOUTHERN CA	151.265	159.330		RO-6
6100 Riverside (west)	151.385	159.360	USFS AD	Perris
Riverside (east)	151.175	159.285	USFS AD	Indio

6200 Riverside County Equipment				
6300 San Diego	151.190	159.225	USFS AD	Monte Vista
6500 San Bernardino	151.445	159.390	USFS AD	San Bern'd'o
6600 San Diego County Equipment				
6900 San Bernardino County Equipment				

STATE NET	151.355	159.300

AIR NETS	
Blue	151.280
Green	151.295
Yellow	151.310
USFS Air Dispatch	168.625

HANDIE-TALKIE NET - Red 151.220

John C. Gibson (CASLO04)
SAN LUIS OBISPO COUNTY FIRE AND CALIF. DEPT. OF FORESTRY
I am a dispatch officer for CDF. We also handle the dispatching for the county fire and three (soon to be four) fire districts. The following is the frequencies which we can use.

FREQ.	DESIGNATOR	MODE	USE
151.325	Local	R	A CDF freq. used to dispatch both county equip. and CDF. Used as Command Freq. Primary.
154.385	County Net	Smpx	A S.L.O.Co. freq. used to dispatch the fire districts. Also used as a secondary command net.
151.445	Region	R	A CDF freq used as car to car for fire ground on large fires. Can also be used as a command net.
151.355	State	R	Same as region net.
154.280	White	Smpx	Mutual aid freq. Used as fire ground coordination in multiple agencies fire.
151.280	Blue Air	smpx	A CDF freq. use to talk to only the aircraft. The aircrafts use it extensively when doing retardent drops.
154.160	OES#1	R	Used to talk to the Calif OES equip. It is used very little.
151.220	Red net	Smpx	A CDF net used only in the handie-talkies. At the present the engines do not have this freq. The dispatch does not have it either. Used by the dozers and hand-crews.

NOTE-Local, Region, and State freq. can also be used in simplex.

STATION	UNITS				
Cambria	5377	Eng 110	5311		
Cambria FPD	Eng 1	Eng 2	Eng 4	WW	
Cayucos	5380				
Cayucos FPD	Eng 1	Eng 2		Oak Shore Eng	114
La Panza	5378			Squad	414
Las Tablas	5360				
Nipomo	5379	5373	5312	Eng 120	
Paso Robles	5362	5372	5313	Heritage Rch	113
S.L.O. Hqt.	5374	5364			413

S.L.O. Airport	Eng 121 crash 1 crash 2
Santa Margarita	5375 5381 5314 Eng 140
Shandon	5362 Eng 131 Squad 431
Simmler	Eng 142
Templeton	Eng 132
Templeton FPD	Eng 1 Eng 2

NOTE-53=SLOCDF 60thur89=eng 10thur19=B.C. All others are Co. engs with the exception of the FPD.

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From ERIC (CA-LA-045):

Now that "FIRESCOPE" is in full operation, some people might be interested in some of the radio jargon. First of all, the different types of strike teams are designated as follows:

A - Consists of four engine companies of at least 1250 GPM, one truck company (can be a snorkel or squrt), and one battalion chief. A structure firefighting strike team. 'Alpha'

B - Consists of five engine companies of at least 1000 GPM, and one battalion chief. A structure or brush firefighting strike team. The most common designation here in Southern California due to our numerous brushfires. 'Bravo'

C - Consists of five engines or patrols of at least 500 GPM, and a strike team leader. Usually used in brushfire mop up operations. 'Charlie'

F - Consists of five tractor companies with transporters, and a strike team leader. Only for brush firefighting. 'Fox'

The numerical designation is as follows:

1-49 Are designated to a strike team when they are formed by their own dispatcher.

50-99 Are designated to a strike team made up by the 'IC' (Incident command) at the incident's actual location.

So, for example, 'Bravo 24' is a strike team of five engines of at least 1000 GPM with a battalion chief formed by their own dispatcher. 'Bravo 54' is the same thing, only they were formed at the scene by the 'IC'. By the way, in Southern California, numbers 20-29 are reserved for Los Angeles City Fire Department strike teams.

Some other terms heard:

'IC'- Incident Command, overall coordinator, the final say

'Sitstat'- Situation Status Officer, usually a battalion chief who monitors progress of fire

'Restat'- Resources Status Officer, who keeps tabs on if they have enough men and equipment to do the job

'Base'- The fire camp where all relief crews report

'Staging'- The forward area where engines and crews rendezvous before actually moving to fireline

'Lobby'- Only used in a highrise structure firefighting operation, officer who maintains elevator control, directs men and equipment to staging

'Tac'- Used in conjunction with a number (i.e.; 'Tac 2') to designate any combination assigned to do a specific task, such as protect a television transmitter from a brush fire, and are thendissolved.

LOS ANGELES COUNTY FIRE DEPARTMENT-EQUIPMENT

"L.A." BATTALION 1 P1 154.43

Sta. 7-West Hollywood
Engine 7

Sta. 8-West Hollywood
Engine 8
Engine 208
Squad 8
Truck 8
Battalion 1

Sta. 14-Athens
Engine 14
Engine 214

Sta. 18-Lennox
Engine 18
Squad 18

Sta. 21-Lawndale
Engine 21

Sta. 38-Windsor Hills
Engine 38
Squad 38

Sta. 58-Ladera Heights
Engine 58

Sta. 60-Universal City
Engine 60
Engine 260
Patrol 60

Sta. 110-Marina Del Rey
Engine 110
Truck 110
Boat 110

ALSO: Utility 1, Repair 1

"VALLEY" BATTALION 2 P2 154.34

Sta. 62-Claremont
Engine 62
Patrol 62

Sta. 64-San Dimas
Engine 64
Engine 264
Squad 64
Tanker 64
Battalion 2

Sta. 85-Glendora
Engine 85
Dozer 2

Sta. 86-Glendora
Engine 86
Truck 86
Patrol 86

Sta. 97-North Azusa
Engine 97
Patrol 97

Sta. 101-Claremont
Engine 101

Sta. 102-Claremont
Engine 102
Patrol 102

Sta. 141-San Dimas
Engine 141

Sta. 151-Glendora
Engine 151
Squad 151

ALSO: Utility 2, Repair 2

"L.A." BATTALION 3 P1 154.43

Sta. 1-City Terrace
Engine 1

Sta. 3-East Los Angeles
Engine 3
Squad 3
Truck 3
Battalion 3

Sta. 22-Commerce
Engine 22

Sta. 27-Commerce
Engine 27
Engine 227
Truck 27

L.A. COUNTY FIRE EQUIPMENT(CON'T.)

Sta. 39-Bell Gardens
Engine 39
Squad 39

Sta. 50-Commerce
Engine 50
Air Comp. 50

Sta. 89-Commerce
Engine 89

ALSO: Utility 3, Repair 3

"VALLEY" BATTALION 4 F2 154.34

Sta. 11-Altadena
Engine 11
Squad 11

Sta. 12-Altadena
Engine 12

Sta. 19-La Canada Flintridge
Engine 19
Squad 19

Sta. 63-La Crescenta
Engine 63

Sta. 66-Pasadena
Engine 66
Patrol 66

Sta. 82-La Canada Flintridge
Engine 82
Engine 282
Truck 82
Patrol 82
Battalion 4

ALSO: Utility 4, Repair 4

"ANTELOPE" BATTALION 5 F3 154.40

Sta. 65-Agoura
Engine 65
Patrol 65

Sta. 67-Monte Nido
Engine 67
Patrol 67

Sta. 68-Calabasas
Engine 68
Patrol 68
Battalion 5

Sta. 69-Fernwood
Engine 69
Patrol 69

Sta. 70-Malibu
Engine 70
Patrol 70

Sta. 71-Malibu Riviera
Engine 71
Patrol 71

Sta. 72-Lechusa Canyon
Engine 72
Patrol 72

Sta. 75-Chatsworth Lake Manor
Engine 75
Patrol 75

Sta. 88-Malibu Beach
Engine 88
Squad 88

Sta. 99-Encinal Beach
Engine 99

Sta. 125-Brents Junction
Engine 125
Engine 325
Squad 125
Patrol 125

Sta. 144-Westlake Village
Engine 144
Tanker 144

ALSO: Utility 5, Repair 5

L.A. COUNTY FIRE EQUIPMENT(CON'T.)

"ANTELOPE" BATTALION 6 F3 154.40

Sta. 46-Olive View
Engine 46

Sta. 73-Newhall
Engine 73
Engine 273
Patrol 73
Patrol 273
Tanker 73
Foam 73
Dozer 6
Battalion 6

Sta. 74-Kagel Canyon
Engine 74

Sta. 76-Castaic Junction
Engine 76
Patrol 76

Sta. 81-Sleepy Valley
Engine 81
Patrol 81
Tanker 81

Sta. 107-Canyon Country
Engine 107
Engine 307
Patrol 107

Sta. 111-Bouquet Canyon
Engine 111
Squad 111

Sta. 123-Sulphur Springs
Engine 123
Patrol 123

Sta. 149-Castaic
Engine 149
Patrol 149

ALSO: Utility 6, Repair 6

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"L.A." BATTALION 7 F1 154.43

Sta. 6-Lomita
Engine 6
Squad 6

Sta. 10-Carson
Engine 10
Foam 10

Sta. 36-Carson
Engine 36
Engine 236
Squad 36
Battalion 7

Sta. 53-Portuguese Bend
Engine 53

Sta. 55-Avalon
Engine 55
Patrol 55

Sta. 56-Rolling Hills
Engine 56

Sta. 83-Miraleste
Engine 83
Patrol 83

Sta. 95-West Compton
Engine 95

Sta. 105-Carson
Engine 105
Deluge 105

Sta. 106-Rolling Hills Estates
Engine 106
Squad 106
Truck 106

Sta. 116-Carson
Engine 116
Squad 116
Truck 116

Sta. 127-Carson
Engine 127
Truck 127

Sta. 155-Isthmus Cove
Engine 155
Patrol 155

ALSO: Utility 7, Repair 7

****

L.A. COUNTY FIRE EQUIPMENT(CON'T.)

'L.A." BATTALION 8 F1 154.43

Sta. 15-Whittier
Engine 15

Sta. 17-Whittier
Engine 17

Sta. 20-Norwalk
Engine 20
Squad 20
Truck 20
Engine 407

Sta. 25-Pico Rivera
Engine 25

Sta. 28-Whittier
Engine 28
Squad 28
Truck 28
Salvage 28
Engine 409
Battalion 8

Sta. 40-Pico Rivera
Engine 40
Squad 40

Sta. 49-La Mirada
Engine 49
Squad 49
Truck 49

Sta. 59-Whittier
Engine 59

Sta. 96-South Whittier
Engine 96

Sta. 103-Pico Rivera
Engine 103
Light 103

ALSO: Utility 8, Repair 8

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"L.A." BATTALION 9 F1 154.43

Sta. 23-Bellflower
Engine 23

Sta. 30-Artesia
Engine 30

Sta. 31-Paramount
Engine 31
Squad 31
Truck 31

Sta. 34-Hawaiian Gardens
Engine 34

Sta. 35-Cerritos
Engine 35

Sta. 45-Lakewood
Engine 45
Truck 45
Battalion 9

Sta. 94-Lakewood
Engine 94
Squad 94

Sta. 98-Bellflower
Engine 98

Sta. 115-Norwalk
Engine 115

Sta. 122-Lakewood
Engine 122

Sta. 154-Signal Hill
Engine 154

ALSO: Utility 9, Repair 9

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L.A. COUNTY FIRE EQUIPMENT(CON'T.)

"VALLEY" BATTALION 10 F2 154.34

Sta. 4-Rosemead
Engine 4

Sta. 5-West Arcadia
Engine 5

Sta. 29-Baldwin Park
Engine 29
Squad 29
Truck 29
Engine 405

Sta. 42-Rosemead
Engine 42
Truck 42

Sta. 44-Duarte
Engine 44
Engine 244
Patrol 44
Tanker 44

Sta. 47-Temple City
Engine 47
Squad 47
Helitender 6
Battalion 10

Sta. 48-Irwindale
Engine 48

Sta. 90-South El Monte
Engine 90
Squad 90

ALSO: Utility 10, Repair 10

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"ANTELOPE" BATTALION 11 F3 154.40

Sta. 24-Palmdale
Engine 24

Sta. 33-Lancaster
Engine 33
Engine 233
Squad 33

Sta. 37-Palmdale
Engine 37
Squad 37

Sta. 77-Sandberg
Patrol 77

Sta. 78-Lake Hughes
Engine 78
Patrol 78

Sta. 79-Valyermo
Engine 79
Patrol 79

Sta. 80-Santiago
Engine 80
Patrol 80
Tanker 80

Sta. 84-Quartz Hill
Engine 84

Sta. 92-Littlerock
Engine 92

Sta. 93-Pearlblossom
Engine 93

Sta. 112-Antelope Acres
Engine 112

Sta. 117-Lancaster
Engine 117

Sta. 129-Lancaster
Engine 129
Truck 129
Battalion 11

Sta. 140-Leona Valley
Engine 140
Patrol 140

Sta. 157-Green Valley
Engine 157

ALSO: Utility 11, Repair 11

****

L.A. COUNTY FIRE EQUIPMENT(CON'T.)

"VALLEY" BATTALION 12 F2 154.34

Sta. 26-La Puente
Engine 26

Sta. 43-Industry
Engine 43
Squad 43

Sta. 61-Walnut
Engine 61
Squad 61

Sta. 87-Industry
Engine 87
Deluge 87

Sta. 91-Hacienda Heights
Engine 91
Patrol 91

Sta. 118-Industry
Engine 118
Truck 118

Sta. 120-Diamond Bar
Engine 120
Patrol 120

Sta. 145-Rowland Heights
Engine 145
Engine 408
Battalion 12

Sta. 146-Walnut
Engine 146

ALSO: Utility 12, Repair 12

****

"L.A." BATTALION 13 F1 154.43

Sta. 9-Florence
Engine 9

Sta. 16-North Watts
Engine 16
Squad 16

Sta. 41-Willowbrook
Engine 41

Sta. 52-South Gate
Engine 52
Engine 252
Light 52

Sta. 54-South Gate
Engine 54

Sta. 57-Hollydale
Engine 57

Sta. 163-Bell
Engine 163
Squad 163
Foam 163

Sta. 164-Huntington Park
Engine 164
Squad 164
Truck 164
Battalion 13

Sta. 165-Huntington Park
Engine 165

ALSO: Utility 13, Repair 13

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BRUSH CAMPS

Camp 1-Wayside Honor Ranch
Crew Truck 1-1
Crew Truck 1-2

Camp 2-Oak Grove Park
Crew Truck 2-1
Crew Truck 2-2
Crew Truck 2-3
Food Dispensor

Camp 5-La Verne
Crew Truck 5-1
Crew Truck 5-2
Crew Truck 5-3

Camp 8-Malibu
Crew Truck 8-1
Crew Truck 8-2
Crew Truck 8-3

Camp 9-Saugus
Crew Truck 9-1
Crew Truck 9-2
Crew Truck 9-3
Helicopter 4
Helicopter 10
Helicopter 14
Helicopter 15
Helicopter 16
Dozer
Food Dispensors

L.A. COUNTY FIRE EQUIPMENT(CON'T.)

Camp 12-Castaic
Crew Truck 12-1
Crew Truck 12-2
Crew Truck 12-3

Camp 13-Encinal Canyon
Crew Truck 13-1
Crew Truck 13-2

Camp 15-Big Tujunga Canyon
Crew Truck 15-1
Crew Truck 15-2
Crew Truck 15-3
Crew Truck 15-4

PUBLIC SAFETY WEST

PUBLIC SAFETY - WEST

Send Public Safety and Special Emergency frequencies, radio system details and questions for Alaska, Arizona, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington and Wyoming to:

George Hoggatt, 17473 E. 16th Drive, Aurora, CO 80011.

Welcome to August (if the Post Office gets this there on time). Not a lot for this month, but at least there is a little. However I am renewing my notion of merging this column back with C alifornia. There just isn't enough support from the members out there. Most of the other columns have 6 to 8 pages every month. This wone is doing good if it has two. just not enough to justify a whole column. Eight pages are allocated for this column. If it is merged with another column, that will make another page for the columns that have the member support. So if this column is important, SEND ME DATA!!!!!!!!!

I don't know about other parts of this world, but here in Denver we have two crimes and a piec of equipment that I can't find in the dictionary. The crimes are "burgery" and "robry". I assume that they really are burglary and robbery. I have yet to hear a police dispatcher use the correct word. The piece of equipment suffers from the same problem. It is "amblance". No ambulances.

COLORADO Tim Tonge (MO-070)

Denver Fire Stations and Equipment

NO.	DIST	ADDRESS	CHIEF	PUMPER	TRUCK	OTHER
1	2	745 W. Colfax	2	1	1	Squirt 1
2	no station 2					
3	5	2500 Washington		3		
4	5	1890 Lawrence		4	4 RT4	
5	no station 5					
6	6	1515 13th St.		6		squad 1, Haz. mat van

7	6	2195 W. 38th		7			
8	4	1616 Park Ave.		8			snorkle 8
9	5	4600 Franklin					
10	5	3201 Curtis	5	10		10	
11	2	40 W. 2nd		11		11	
12	6	2575 Federal	6			12	squirt 12
13	3	3683 S. Yosemite		13	RP13		
14	8	1426 Oneida		14	RP14		
15	4	1080 Clayton	4	15		15	
16	3	1601 S. Ogden	3	16			squirt 16
17	6	4500 Tennyson		17	RP17	17	
18	8	2205 Colo. Blvd.		18			
19	4	300 S. Ivy		19		19	
20	7	501 Knox		20			
21	3	1540 E. Virginia		21			
22	3	3530 S. Monaco		22	RP22	22	
23	7	850 S. Federal	7	23		23	
24	3	2695 S. Colorado		24			
25	7	2504 S. Raleigh		25	RP25		
26	8	7645 E. 38th	8	26		26	
27	8	12927 Albrook Dr.		27	RP27	27	
28	7	4306 S. Wolff		28	RP28	28	

Stapleton Airport Station 1 - RED 1, 3, 8, 9, 11 Portable 1
Station 2 - RED 7, 10, 12 Portable 2

Chief 1 is the Fire Chief
A51a thru A51z are arson investigators (X-64 on PD)
EOC Emergency operations center under Civic Center
Fire Alarm Headquarters and radio dispatch at 9th and Columbine
Line Cars - alarm repair
Bureau cars - Fire prevention bureau
Communications shop at 1331 19th st.
Chiefs at stations are assistant chiefs (Battalion chief in most depts.)

Glenwood Springs Colorado Area

BASE	MOBILE	SERVICE	TYPE	REMARKS
155.805	156.015	PL	RP	Police and Sheriff green
155.070	156.090	PP	RP	Sheriff Yellow
155.190	156.150	PP	RP	Police and Sheriff blue
155.340	155.340	PS	BM	EMS
155.250	155.850	PP	RP	Aspen PD

Boulder Colorado area

155.145	155.865	PL	RP	Sheriff and local police dispatch green
155.625	155.625	PP	BM	Sheriff and local police blue
155.655	154.950	PP	RP	Sheriff and local police Yellow surv
155.520	155.520	PP	RP	Sheriff and local police violet info
460.425	465.425	PP	RP	CLEER (intercity net)
155.160	155.160	PS	BM	Rocky Mountain Rescue
154.325	154.325	PF	BM	Red 1 countywide fire dispatch
154.205	154.205	PF	BM	Red 2 city (Boulder) fire operations
154.415	154.415	PF	BM	RED 3 Fire ground
37.10	37.100	PL	BM	RED 5 low band fire dispatch
155.280	155.280	PS	BM	A-1 Ambulance Service
154.980	154.980	PL	BM	Parks, animal wardens
153.860	153.860	PL	BM	Street and highway departments, show plows
155.190	155.700	PP	RP	Colo. Univ. Police Silver
155.025	155.985	PL	RP	Colo. Univ. Police, Parking & traffic GOLD

UTAH Rich Avery (CAAL-020)

UTAH HIGHWAY PATROL

Division 10 "RICHFIELD"

Division 10 consists of the counties of:

Sanpete, Sevier, Piute, Garfield, Western Wayne and Kane.

All agencies in Sanpete Co. are dispatched on Sanpete S.O. Frequency.

In the remaining counties, dispatch servives are provided by the Highway Patrol.

All Emergency Vehicles in the State are equiped with the UHP Statewide Frequency.

Most vehicles have four channel radios, the channel breakdown as follows.
Ch.1-Statewide 155.505
Ch.2-Local UHP Channel (Varies with area)
Ch.3-Car to Car 155.745
Ch.4-Local Agency Frequency (City PD, S.O.,etc.)

UHP Handheld units have Ch.1 and Ch.3

Frequently used freqs in Division 10

155.925 Sanpete S.O.
155.595 UHP Dispatch (Ch.-2)
155.670 Sevier S.O.
155.535 Richfield City PD
155.025 Emergency OPS Center
155.160 Search And Rescue
155.280 Hospital-Paging
155.340 Hospital-Ambulance
47.040 Utah D.O.T.
47.160 Utah D.O.T.

UNIT IDENTIFIERS

UHP----------Badge #
Sanpete S.O.-1Q
Manti PD-----2Q
Ephraim PD---3Q
MT.Pleasant--5Q
Gunnison PD--6Q
Moroni PD----7Q
Fairview PD--8Q
Ftn.Green PD-9Q
Centerfield-10Q
Spring City-15Q

Sevier S.O.--1U
Richfield PD-2U
Salina PD----3U
Monroe PD----4U

Piute S.O.---11V

Garfield S.O.1Y
Panguitch PD-2Y

Wayne S.O.---11T

Kane S.O.----11Z

500 Series Units are Ambulances

10-0	Caution
10-1	Signal Weak
10-2	Signal Good
10-3	Stop Transmitting
10-4	Affirmative (OK)
10-5	Relay (To)
10-6	Busy unless Urgent
10-7	Out of Service
10-8	In Service
10-9	Say Again
10-10	Negative
10-11	____ On Duty
10-12	Stand By
10-13	Existing Conditions
10-14	Information
10-15	Message Delivered
10-16	Reply to Message
10-17	Enroute
10-18	Urgent
10-19	In Contact
10-20	Location
10-21	Call (____) by Phone
10-22	Disregard
10-23	Arrived at Scene
10-24	Assignment Completed
10-25	Report to ____ (Meet)

Typical unit number:

2U4, Richfield PD, car #4
1U501, Sevier Co. Ambulance
353,25,123,210, UHP Troopers

10-26 Estimated Time of Arrival
10-27 License/Permit Information
10-28 Ownership Information
10-29 Records Check
10-30 Danger/Caution
10-31 Pick Up ____
10-32 ____ Units Needed
10-33 Help Me Quick
10-34 Time
10-35 None of your business
10-36 Security Check
10-37 Back off dummy (unofficial)
10-38 Computer Down
10-39 Urgent Use Light and Siren
10-40 Silent Run, No Lights
10-41 Beginning Tour of Duty
10-42 Ending Tour of Duty
10-43 Shuttle
10-44 Permission to Leave
10-45 Animal Carcass at ____
10-46 Assist Motorist
10-47 Investigate Suspicious Vehicle
10-48 Disturbing the Peace
10-49 Traffic Light out at _____
10-50 Accident (F, PI, PD)
10-51 Wrecker Needed
10-52 Ambulance Needed
10-53 Traffic Control
10-54 Change to Channel ____
10-55 Intoxicated Driver
10-56 Intoxicated Pedestrian
10-57 Hit and Run (F, PI,PD)
10-58 Airplane Crash
10-59 Reckless Driver
10-60 Out of Car on Violator at ____
10-61 Motor Inspection
10-62 Request Permission Car to Car
10-63 Prepare to Make Written Copy
10-64 Vandalism
10-65 Juvenile Problem
10-66 Major Crime Alert
10-67 Net Message
10-68 Runaway Juvenile
10-69 Missing Person
10-70 Fire Alarm
10-71 Nature of Fire
10-72 Progress Report on Fire
10-73 Rape
10-74 Civil Disturbance
10-75 Domestic Problem
10-76 Meet Complainant
10-77 At Home Office
10-78 Back Up ____
10-79 Notify Coroner

10-80 Chase in Progress
10-81 Breatherlizer Report
10-82 Prisoner in Custody
10-83 Confidential Information
10-84 Visitors Present
10-85 Victims Condition
A. Fair C. Critical
B. Poor D. Possible Fatality
E. Obvious Fatality
10-86 Crime In Progress
10-87 Abandoned Car
10-88 Man with Gun
10-89 Bomb Threat
10-90 Bank Alarm At ____
10-91 Burglary
10-92 Theft
10-93 Unnecessary Use of Radio
10-94 Contact Your Home
10-95 Out at Home
10-96 Mental Subject
10-97 Test Signal
10-98 Prison Break
10-99 Wanted/Stolen Indicated

Las Vegas Nevada area — This submission was unsigned. If the member will let me know who he (or she) is, I'll give proper credit.

LAS Vegas Police Dept.

Chan. A 159.150/453.250 repeater
B 159.090 repeater
C 158.850 repeater
D 158.745 repeater
E 159.210 repeater
F 159.030/455.4875 repeater
ed. note 455.4875 is a Remote Broadcast mobile frequency
G 158.790 repeater
H 158.970 repeater

Nevada Highway Patrol

Chan. 1 42.56
2 42.78
3 42.88
4 42.94

Henderson Police

154.875 155.865 155.490

Mercy Ambulance

155.205 462.975

Las Vegas Flight for Life

155.280 158.940

Sheriff's Jeep Posse

155.370 repeater
155.550

Las Vegas City Fire

453.150 repeater
453.400 repeater

North Las Vegas Police

460.125 460.075
460.050

Boulder City

154.800 PD 155.040 FD

Clark County Fire

453.100 repeater
453.700 repeater

North Las Vegas Fire

154.250

Gayle

PUBLIC SAFETY - NORTHEAST:

Send Public Safety and Special Emergency frequencies, radio system details, and questions as follows -- New England states, New York, Pennsylvania, New Jersey, Maryland, and Delaware:

Richard Barnett, P.O. Box 428, Newton Highlands, MA 02161.

Greetings from the NORTHEAST! I was very sorry to hear of Mike Redman's departure as I know he would have continued as an excellent president. I was pleased, however, to learn that the Public Safety columns were being re-districted. By adding more regionalized P.S. editors the overall position of our newsletter will undeniably be enhanced and solidified. Members will be more inclined to contribute to an editor who is nearby and has at least some idea of the territory he's covering.

I'll have to re-think how I'll set-up this new area and thus please forgive me for the shortness this month. Perhaps I'll cover each state separately, but if I do try to do that, I'll definitely need more input from our northern New England members. Finally, many thanks to all those contributors in the states that I'm losing who have been so helpful over the past few years.

New England

From Bill (CT-038):

Enclosed is a list of some of my Connecticut frequencies (only part was printed in this issue). All of the named agencies in this list are confirmed. If any Connecticut members would like to get together and exhange information, I'd like to hear from them. They can reach me at: Bill Moore 950 Farmington Avenue Apt. C-1, New Britain, Connecticut 06053. Note: Can anyone tell me what RAFS stands for? It is an intercity frequency of 460.175 used in Connecticut and Mass.

FREQUENCY LIST:

LAW ENFORCEMENT

State Police:

42.040	KCA-788 Troop H(Hartford) Also Statewide
42.360	
42.480	
42.520	
154.665	Communications between troops
154.860	Prisons
170.875	Danbury Federal Prison Facility
154.875	Dep't of Motor Vehicles(Inspectors)
45.860	Hot Line(Intersystem)

City of Hartford Police:

460.050	KCA-330(North) F-1
460.200	KCA-330(South) F-2
460.375	KCA-330(Vehicle Registration Checks) F-3
460.400	KCA-330(Detectives & General Chatter) F-4
460.075	Not used too often
460.175	Intersystem

Other Police Departments:

45.380	KSK-481	Town of Avon
45.460	KCD-716	Town of Berlin
45.420	KCU-767	Town of Bloomfield

460.475	KCD-841	Town of Cheshire(Also uses 155.310)
460.250	KCA-460	Town of East Hartford
460.275	KUU-538	Town of East Windsor
155.010	KCA-943	Town of Enfield(Possibly also 155.970)
46.520	KCH-287	Town of Farmington
46.020	KCC-844	Town of Glastonbury
460.125	KTO-334	Town of Manchester(Also uses 155.550)
45.180	KCA-832	City of Meridan
155.370	KCA-662	City of Middletown
453.275	KLR-399	City of New Britain
460.425	KUQ-819	Town of Newington
159.210	KCF-771	Town of Old Saybrook
155.595	KCA-917	Town of Plainville
45.540	KRA-514	Town of Rocky Hill
45.620	KJS-864	Town of Simsbury
155.250	KCA-347	Town of Southington
460.325	KSI-977	Town of Vernon(Also: 154.845 KLU-252)
158.730	KCA-833	Town of West Hartford F-1
158.790	KCA-833	Town of West Hartford F-2
460.350	KTN-459	Town of Wethersfield
155.610	KCD-305	Town of Windsor Locks
45.220	KGE-289	Town of Windsor

FIRE DEPARTMENTS:

154.310	KCA-201	City of Hartford F-1
154.205	KCA-201	City of Hartford F-2
154.190	KCB-213	City of New Britain(Possibly also uses 154.235)
154.430	KCB-851	South Manchester(Paid FD)
33.940	Hartford County Fire Network	
33.900	Tolland County Fire Network	
460.600	WZT-682	Town of East Hartford
154.220	Wallingford FD	
154.265	Alarm Room News F-1	
154.540	Alarm Room News F-2	

AMBULANCE COMPANIES:

462.975	KEG-654	Town of Manchester F-1
461.350	KEG-654	Town of Manchester F-2(Also Manchester Taxi)
155.220	KTZ-446	Professional Ambulance Hartford
160.950	KCA-836	Maple Hill Ambulance Hartford
461.450		Trinity Ambulance Hartford
464.100		L&M Ambulance F-1 West Hartford
463.225		L&M Ambulance F-2 West Hartford
155.280	KXX-441	West Hartford Volunteer
453.275		New Britain EMS(This is the Police frequency) (Possibly also on 47.660)
462.950	KEG-707	Wethersfield Volunteer
155.610		Windsor Locks EMS(This is also the Police frequency)
156.000		Newington EMS
453.425		East Windsor Ambulance(Includes Phone Patch)
153.380		Pratt & Whitney Ambulance
45.920	KEV-412	G&L Ambulance Farmington

University of Connecticut Health Center Paramedics:

33.940
45.920
46.520
155.715

Other Frequencies:

News Media

455.850	KCG-958	WTIC(Including "Air One"& CVS Good Samaritan)
450.550		Channel 3(Including "Sky 3" Helicopter)
453.000	KVY-296	Hartford Courant
458.000	WAB-426	Hartford Courant
161.670		?
161.640		?

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Canon, GA 30520
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MasterCard VISA

PAID ADVERTISEMENT

New York

From:RCMA Group N.Y. New York City E.M.S.:

The H.&H. Corp. of N.Y.C. has assigned all E.M.S. vehicles NEW Unit Numbers. At this time there is NO Official Assignment List available to the scanner hobbyist and E.M.S. buff.
Each Hospital has also been assigned a number (I.E.; 1-Bellevue) as well. No list is available of those either at this time.
The following are the basic Unit Designations that we as E.M.S. listeners should be concerned about, more so than the others (which are unavailable to us all).

CAR 1-Cheif of E.M.S. OP's
CAR 50-Communications Supv.
M.E.R. Van-Mobile Emerg. Room
FIELD COMM.-Mobile Comm. Van
A.L.S.-Advance Life Support Ambul.
B.L.S.-Basic Life Support Ambul.
E.V.O.C.-Evasive Operations Training Cars
PARAMEDIC AMBULANCE UNITS.
Series 700-705-H.&H. Corp.
P.D. R.M.P.'s.

That is about it. If anyone has any other listings please do send them to this column's editor.

Nassau County Police Radio Signals (10)

00	
01	Back in Service
02	Radio Check
03	Not Needed-Ret. to Post
04	O.K. Acknowledgement
05	On Personal
06	On Coffee
07	On Meal
08	Off Meal, Coffee, Personal
09	Repeat Message
10	Call Your Command
11	Report to Command or as Directed
12	Acknowledge Call from Radio
13	Report to Nassau County Jail as Directed
14	
15	Hit Plate, Vin or Warrant
16	On Crossing
17	Off Crossing
18	Any Messages?
19	No Messages
20	Location
21	Plate for Loss
22	Plate for Ownership
23	Plate for Owner and Loss
24	Warrants CHIEF
25	Warrants NCIC
26	Vin for Loss
27	
28	
29	
30	Assigned by Phone
31	Requests Perm to go to S.H.
54	Request Mini Moe
55	Request Large Depart, Tow
56	Request Small Depart, Tow
57	Request Light Truck
58	Request Bomb Truck
59	Request Crime Scene Search
60	Request Helicopter
61	Request Marine Unit
62	
63	Responding to Command
64	Responding to Command with an Arrest
65	Respond to (Location and Type Investigation)
66	Completed Last Assignment-(Responding to (Give Location))
67	Out of Service - Reason and Location
68	Out of Service - No Operator
69	
70	Frequency in Use for Special Assignment-Do Not Use for Emerg. Messages (Use Main Bands)
71	
72	
73	
74	
75	
76	
77	
78	Police Officer in Danger
79	
80	Leave on Assignment
81	At Scene

32 Out of Service to Court
33 Clear Channel (Any Emerg. Request)
34
35
36 Time
37
38 Request Car to Car Capability
39 Request Complainant
40 At Scene Give Assistance a Disregard
41 One Car Assistance Request
42 Request Two Car Assistance
43 Request Supervisor
44 Request Impound
45 Request Detectives
46 Request S.I.B.
47 Request M.E.
48 Request Wagon and Basket
49 Request TELCO
50 Request LILCO
51 Request Washdown
52 Request Ambulance
53 Request Large Emergency Truck

82 Leaving Scene for Hospital
83 At Hospital
84 Leaving Hospital-Return to Post
85 Not Needed - Return to Post
86 On Post
87
88
89
90
91 Meet at - (Location)
92 Meet at Command Post
93 Meet at Major Crime Scene
94 Respond with Shotguns and Vests
95 Respond with Jump Suits and Helmuts
96 Respond in Old Clothes
97 Precision Firearms Teams and Equipment
98
99 Possible Emergency Situation - Respond Quietly
100

SUFFOLK COUNTY UNIFORM RADIO SIGNALS

1. Disaster or Severe Emergency- (Air Clearance Requested - Avoid All But Emergency Transmission)
2. Proceeding to Alarm
3. Additional Help Needed From Own Department (Specify)
4. Everything Under Control - (Do Not Dispatch Additional Apparatus - Apparatus on Road Proceed With Caution)
5. Return to Base
6. Leaving Unit Unattended (State Reason)
7. Returned to Unit
8. Refreshments
9. Standing By
10. Call Police Department
11. Call Utility Company (Specify)
12. Brush Fire
13. Structural Fire
14. Vehicle Fire
15. Drill or Practice Session
16. Ambulance Call
17. Breakdown - Unable to Proceed
18. Proceeding to Hospital
19. Radio Test
20. Switch to F-2
21. At the Scene
22. Location
23. Miscellaneous Alarms (Specify Investigation-Wash Down, Still Alarm, Cave-in, Etc.)
24. Mutual Aid - (Specify)
25. Dismiss Men
26. Boat Fire
27. Plane Crash
28. Ready for Service (Specify Location)
29. Turn on Traffic Light
34. Telephone Headquarters

COMMUNICATIONS PROFILE

RCMA Asst. Editor, 1 West Potomac, Williamsport, MD 21795

This column is for special projects that explain various radio systems in detail. Frequencies and radio codes of not only municipal agencies and certain federal government agencies may be listed, but also large businesses and corporations. The contribution must be lengthy enough that publishing it in one of the regular columns would not be possible. If you are inclined to submit a report, please follow No. 8 in the inside front cover of the Newsletter.

New Jersey
From Rickey (NJ-001):

North Brunswick Police Radio Codes

Dispatch Signals

0 Armed and/ or Caution
1 Drunk Driver
2 Drunk Pedestrian
3 Hit & Run
4 Accident
5 Murder
6 Escaped Prisoner
7 Dead Person
8 Missing Person
9 Stolen Tag
10 Stolen Car
11 Abandoned Car
12 Reckless Driver
13 Suspicious Car
13-P Suspicious Persons
14 Information
15 Special Detail
16 Obstruction on Highway
17 Contack
18 Felony
19 Misdemeanor
20 Mentally Ill Person
21 Breaking & Entering
22 Disturbance
23 Pedestrian or Hitchhiker
24 Holdup
25 Fire
26 Drowning
27 Prowler or Peeping Tom
28 Riot
29 Reckless Operation of Boat

Ten Signals

10-01 Receiving Poorly
10-02 Receiving Well
10-03 Stop Transmitting
10-04 Acknowledgement
10-05 Relay to___
10-06 Busy
10-07 Out of Service
10-08 In Service
10-09 Repeat, Conditions Bad
10-10 Out of Service-Subject to Call
10-11 Dispatching too Rapidly
10-12 Officials or Visitors Present
10-13 Weather or Road Conditions
10-14 Convoy or Escort
10-15 Prisoner in Custody
10-16 Pick up Prisoner at___
10-17 Conduct Investigation
10-18 Complete Assignment Quickly
10-18X No Siren or Red Lights
10-19 Return to Your Station
10-20 Your Location
10-21 Call Station by Phone
10-22 Disregard
10-23 Stand-by
10-24 Trouble- Send Help
10-25 In Contact with____
10-26 Message Received
10-27 Any Answer Our Number?
10-28 Check Registration
10-29 Stolen and/or Wanted
10-30 Against Rules & Regulations
10-31 Gas Up (Joe's Sunoco)
10-32 Drunkometer Oper. Available?
10-33 Emergency Traffic
10-34 Confidential Information
10-36 Correct Time
10-37 Operator on Duty?
10-38 Block Road(s) at___
10-39 Message Number
10-40
10-41 In Posession of___
10-42 Out of Service at Home
10-43 Any Traffic for____
10-44 Pick up Papers at___
10-45 Call___by Phone
10-46 Urgent
10-47
10-48 End Message-Did You Receive?
10-49
10-50 Stopping Vehicle
10-51 Enroute
10-52 Estimated Time of Arrival
10-53 Coming by Office
10-54 Negative
10-55 Calling Car to Car
10-56 Meet____at___
10-57---10-64_____
10-65 Can You Copy?
10-66 Cancel
10-67 Stop Food-Middlesex Diner
10-68 Bathroom Stop
10-70 Send Wrecker
10-71 Send Ambulance
10-88 Where Can___Be Reached
10-97 Arrived at Scene
10-98 Completed Assignment
10-99 Unable to Receive Your Signal
10-100 Alert-Remain in Contact with Station by Phone

(10-75 = Back-up)
(10-91/92/93 = Overtime Work)

Public Safety/East continued

Pennsylvania

From Marty (PA-085):

Here is all the info you could ask for to start monitoring the Schuylkill County, Pennsylvania, public safety frequencies.

Schuylkill Co. Contion Police Radio

Ch.1-155.805 KDR-480 Repeater
Ch.2-155.745 KDR-480 Police to Medic unit comm.
Ch.3-Is the unit's police dept. local freq.
Ch.4- -------- --------- ---------
Ch.5-Is the unit's police dept. local freq.

Schuylkill Co. Contion Fire Radio

Ch.1-46.500 KYO-343 Dispatch & Fire Ground Traffic
Ch.2-Is the unit's Fire Dept. local freq.

Schuylkill Co. Contion Med. Radio

Ch.1-155.340 KJZ-972 Amb. to Hosp. Regional Med.
Ch.2-155.745 KDR-480 Police to Medic unit comm.
Ch.3-Is the unit's local Medic freq.
Ch.4-155.175 KJZ-972 Amb. to Hosp. Amb. to Rescue units

Schuylkill Co. Contion Paging freq.

154.070 WZT-904 E.M.T., Amb. & Rescue paging

Schuylkill Co. Police, Fire & Amb. local freq.

Coaldale
155.730-Ch.3 Mobile Police
155.205-Ch.3 Mobile Amb.

Cressona
155.790-Ch.3 Mobile Police

Girardville
154.860-Ch.3 KT-2442 Police

Hegins Twp.
46.560-Ch.3 KYY-883 Police

Llewellyn
46.180-Ch.2 WXP334 Fire

Maharov City
46.320-Ch.2 KN-5771 Fire
155.775-Ch.3 KTG-749 Police & Amb.

McAdoo
154.370-Ch.2 Mobile Fire

Mechaniscville
46.360-Ch.2 KCE-474 Fire
155.985-Ch.3 Mobile Police

Minersville
46.180-Ch.2 KXO-910 Fire
155.625-Ch.3 KXA-407 Police & Amb.

New Philadelphia
46.360-Ch.2 Mobile Fire
155.985-Ch.3 Mobile Police

Orwigsburg
155.790-Ch.3 Mobile Police

Palo Alto
46.360-Ch.2 Mobile Fire
155.985-Ch.3 Mobile Police

Port Carbon
46.360-Ch.2 KGF-870 Fire
155.985-Ch.3 WXT-844 Police

Pottsville
46.080-Ch.2 KGF-757 Fire
155.955-Ch.3 KLH-939 Police & Amb.
156.450-Ch.5 KGA-836 Police Rpt.

Rust Twp.
155.190-Ch.3 KKG-970 Police

Ryan Twp.
155.775-Ch. 3 Mobile Police

St. Clair
46.340-Ch.2
156.000-Ch.3 KDF-526 Police & Amb.

Schuylkill Haven
155.790-Ch.3 KGF-739 Police & Amb.

Schuylkill Twp.
155.895-Ch.3

Shenandoah
46.480-Ch.2 KZ-6372 Fire
155.250-Ch.3 KGB-473 Police

Tamaqua
46.580-Ch.2 KGF-805 Fire
155.610-Ch.3 KGC-516 Police & Amb.

Tremort
155.205-Ch.3 KGL-626 Amb.

West Maharoy Twy.
154.860-Ch.3 KVJ-725 Police

Pine Grove
155.775-Ch.2 KTG-750 Fire
155.775-Ch.3 KTG-750 Police & Amb.

SCHUYLKILL CO. CONTION POLICE UNITS 155.805MHz & 155.745MHz

From	Through		From	Through	
1	3	Radio Maintenance	101	115	Minersville
4	15	Co. Sherriff	116	117	New Castle Twp.
16	40	Pottsville	118	119	New Philadelphia
41	44	Ashland	120	121	N. Union Twp.
45	46	Auburn	122	123	Norwegian Twp.
47	48	Blythe Twp.	124	127	Orwigsburg
49	50	Branch Twp.	128	129	Palo Alto
51	54	Butler Twp.	130	135	Pine Grove
55	56	Cass Twp.	136	138	Port Carbon
57	58	Coaldale	139	140	Reiley Twp.
59	62	Cressona	141	143	Ringtown
63	64	Deer Lake	144	146	Rush Twp.
65	66	E. Norwegian Twp.	147	149	Ryan Twp.
67	68	E. Union Twp.	150	154	St. Clair
69	70	Foster Twp.	155	162	Schuylkill Haven
71	75	Frackville	163	166	Schuylkill Twp.
76	77	Gilberton	167	175	Shenandoan
78	83	Girardville	176	181	Tamaqua
84	85	Gordon	182	183	Tower City
86	89	Hegin Twp.	184	186	Tremont
90	91	Hubley Twp.	187	188	Union Twp.
92	93	Kline Twp.	189	190	Walker Twp.
94	101	Mahanoy City	191	194	W. Mahanoy Twp.
102	103	Mahanoy Twp.	195	197	Mechanicsville
104	107	McAdoo	198	199	W. Penn Twp.

SCHUYLKILL CO. CONTION TEN CODE

10-01 Signal weak
10-02 Signal is good
10-03 Stop transmitting
10-04 Affirmative
10-05 Relay
10-06 Busy
10-07 Out of Service
10-08 In service
10-09 Repeat
10-10 Negative
10-11 _____ on duty
10-12 Stand by
10-13 Report ___ conditions
10-14 Information
10-15 Message delivered
10-16 Reply to message
10-17 En route
10-18 Urgent
10-19 Return to ___(station)
10-20 Location
10-21 Call____by phone
10-22 Disregard
10-24 Assignment completed
10-25 Report to meet_____
10-26 ETA(estimated time of arrival)
10-27 License/Permit information
10-28 Vehicle registration information
10-29 Check records for wanted
10-30 Use caution
10-31 Pick-up
10-32 _____units requested
10-34 Correct time
10-40 Advise if _____ is on station or available
10-42 Does not conform to reculations
10-43 Weather and road report
10-44 Stations involved acknowledge
10-45 Accident
10-46 Holding suspect(Rush Reply)
10-47 Send Ambulance
10-71 Stopping suspicious vehicle
10-88 Package for _____
10-89 _____is calling you
10-97 How is reception
10-99 EMERGENCY THIS STATION. ALL UNITSCOPY.INTERFERING STA. STAND BY

SCHUYLKILL CO. CONTION FIRE UNITS 46.500 MHz

From	Through		From	Through	
1	100	Pottsville	530	539	Mount Carbon
101	199	County & C.D. Use	540	549	New Castle Twp.
200	209	Ashland	550	559	New Philadelphia
210	219	Auburn	560	569	New Ringgold
220	229	Barry Twp.	570	579	N. Manheim Twp.
230	239	Blythe Twp.	580	599	Norwegian Twp.
240	249	Branch Twp.	600	609	Orwigsburg
250	259	Butler Twp.	610	619	Palo Alto
260	269	Cass Twp.	620	629	Pine Grove
270	279	Coaldale	630	639	Port Carbon
280	289	Cressona	640	649	Port Clintion
290	299	Deer Lake	650	659	Porter Twp.
300	309	Delano Twp.	660	669	Reiley Twp.
310	319	E. Brunswick Twp.	670	679	Ringtown
320	329	E. Norwegian Twp.	680	689	Rush Twp.
330	339	E. Union Twp.	690	699	Ryan Twp.
340	349	Eldred Twp.	700	709	St. Clair
350	359	Foster Twp.	710	719	Schuylkill Twp.
360	369	Frackville	720	739	Schuylkill Haven
370	379	Frailey Twp.	740	759	Shenandoah
380	389	Gilberton	760	769	S. Maneim Twp.
390	399	Girardville	770	789	Tamaqua
400	409	Gordon	790	799	Tower City
410	419	Hegins Twp.	800	809	Tremont
420	429	Hubley Twp.	810	819	Tremont Twp.
430	439	Kline Twp.	820	829	Union Twp.
440	449	Landingville	830	839	Upper Mahanton Twp.
450	469	Mahanoy City	840	849	Walker Twp.
470	479	Mahanoy Twp.	850	859	Fredenburg
480	489	McAdoo	860	869	Summit Station
490	499	Mechanicsville	870	879	W. Brunswick Twp.
500	509	Middleport	880	889	W. Mahanoy Twp.
510	529	Minersville	890	899	Andress

SCHUYLKILL CO. CONTION AMB. UNITS 155.340MHz, 155.745MHz & 155.175 MHz

From	Through		From	Through	
900	904	Pottsville	947	949	St. Clair
905	907	Auburn	950	952	Schuylkill Haven
908	910	Coaldale	953	955	Tamaqua.
911	913	Frackville	956	958	Tuscarora Sch. Twp.
914	916	Hegins	959	961	Tower City
917	919	Lost Creek	962	964	Tremont
920	922	McAdoo	965	967	Ashland
923	925	Mahanoy City	968	970	Girardville
926	928	Minersville	971	973	
929	931	New Philadelphia	974	976	
932	934	Orwigsburg	977	979	
935	937	Penn Mahoning Andres	980	982	
938	940	Shenandoah	983	985	
941	943	Pine Grove	986	989	
944	946	Ringtown Valley			

SCHUYLKILL COUNTY HOSP. CALL SIGNS 155.175MHz & 155.340MHz

WXR-349 Ashland General
WXR-350 Coaldale General Hosp.
WXR-351 Pottsville Hosp.
WXR-352 Good Samaritan Hosp.
WXR-353 Locust Mountain Hosp.

PUBLIC SAFETY - GREAT LAKES:

Send Public Safety and Special Emergency frequencies, radio system details, and questions as follows — Illinois, Indiana, Wisconsin, Michigan, Kentucky, and Ohio:

John Arendt, 327 Boulder Hill Pass, Oswego, Illinois 60543.

Greetings from Oswego. It's time for the latest news and views from the Great Lakes area, so I'll get right down to business.

CHICAGO CHAPTER MEETING OF JUNE 12th, 1982 The meeting was called to order at 1:35 P.M. 25 members and 2 guests were present. The following agenda items were discussed:

1. John Arendt summarized the latest news from club headquarters.
2. The upcoming August picnic was discussed.
3. A rather lengthy discussion was held regarding future meetings at our regular location - Nancini's in Berkeley.
4. A round table discussion among those in attendance.

The meeting was adjourned around 3:45 P.M. and was followed by several hours of socializing and pleasantries.

ILLINOIS STATE POLICE DIST. 20 at Pittsfield has apparently resumed limited use of the low-band freq. pair 42.60 base/42.70 mobiles - in contradiction to a previous column (and report by this Editor). Dispatch functions are being monitored occasionally in Oswego on the 154.680 high band freq. Monitoring observations hint that the new dist. includes Scott County (formally in Dist. 9 - Springfield)?

ILLINOIS STATE POLICE AIR-AIR FREQ. Thanks to Chuck (IL-141), I beg to steal a little of the thunder from the aviation column. (Major Hammer - please forgive me). He reports finding I.S.P. L-Lincoln units (aircraft) using 122.975 as an air-air freq. Some of the traffic that he did monitor was of an interesting nature (remember, I.S.P. bases and mobiles are not normally equipped with aircraft radio eqpt). The aircraft-normally found on 42.500 or 155.460 - will say "go to 2297". (One more note on this subject. The pilots and observers in the L-Lincoln units are sworn I.S.P. personnel - hence the reporting of this freq. in my column vs. the aircraft column. Thank you - Major Hammer!).

Chuck (IL-141) also reports the following observations:

1. REND LAKE COLLEGE custodial (and possibly night security) operations on 152.360.
2. An FCC microfiche listing for the UNIVERSITY OF IL on 149.790. (These licenses for 149.790 were given experimental call signs of KS2XFD and KS2XFQ). Do any of our members know what the use of the freq. was?

Chuck (IL-141) has monitored the HERRIN, IL P.D. on a new high band freq. of 155.415 - which is shared with neighboring Johnston City. Herrin units ID as "HR" while Johnston City units ID as "JC". Herrin units still are low-band equipped and can be found on 39.500 and 39.620.

MOULTRIE COUNTY, IL S.D. FREQS. While vacationing down in the Springfield area, Dennis (IL-026) found the sheriff's dept. on an unlisted freq. of 155.625 rptr. out. (Editor's note: as this does not show in the new 1982 Police Call, the latest FCC microfiche produced the following results. Call sign KMG294 is assigned to 155.370-intersystem and 155.625-rptr. Call sign KA7420 is assigned to 155.625-rptr. talkaround and 158.910-rptr. in). The high band freqs. in the 1982 Police Call are incorrect and should be deleted.

ED (IL-004) reports that a new emergency net called ESMARN-Emergency Services Mutual Aid Radio Network has been formed in the Chicago area and can be monitored every Wed. night at 2000 central time on 155.025. Jeff (IL-064) states that the responsible parties for this operation has proposed that the 155.025 freq. be cleared for ESDA and civil defense operations in the state of IL. (Local govt. operations currently being conducted on this freq. in IL would have to be phased out if the proposal were adapted). More on this as it comes in to the editor.

In other ESDA news Jeff (IL-064) reports that the freq. of 45.36 has been made available for "weather coordination" uses in Cook County (ESDA Region 3).

TRICOM AREA FREQS. Dennis (IL-026) has passed on the radio freq. information in use by police and fire depts. for Batavia, Geneva, and St. Charles, Il.

FIRE DEPT.
Ch. 1 154.070 Main Dispatch (a shared freq. "700 units" belong to Fermi NAL)
Ch. 2 154.265 NIFERN
Ch. 3 153.830 Fireground

POLICE DEPT.
Ch. 1 470.9375 Rptr. Out
Ch. 2 470.9375 Simplex (Talkaround)
Ch. 3 470.6125 Rptr. Out
Ch. 4 470.6125 Simplex (Talkaround)
The IREACH freq. of 155.055 is also actively used. State police and Kane County S.D. units operating in the area are e/w this freq.

Carl (WI-054) has passed on information about the WISCONSIN DIVISION OF EMERGENCY GOVERNMENT:

Freq.	Call	Area	"Tower" Location
45.08	KTV686	West & Alternate EOC	Tomah
45.12		Statewide - All Area Bases	
45.16	KJV283	Southeast	Delafield
45.20	KGT483	South & State EOC	Baraboo
45.24	KJV284	Northwest	Hayward
45.32	KGT481	Northeast	Harrison Twp.
45.26	KJV285	East Central	Stockbridge
45.44	KJV286	West Central	Osseo

The state EOC is located at the Division of Emergency Government office in the Hillfarms State Office Bldg. in Madison. The alternate EOC is located at the WSP Dist. 5 office in Tomah. Many counties are licensed for bases and mobiles on the freq. for their area.

Statewide mobile disignators include the following: CD-1 (Administrator), CD-2 (Deputy Administrator), CD-3 thru CD-6, CD-6A, CD-7 thru DC-10, CD-20, CD-30, CD-40, CD-50, CD-60, CD-90 (region Four), and CD-1000 (mobile Command Post).

Carl (WI-054) has also sent in details of three WI county sheriff's radio networks.

DANE COUNTY (8-channel radios)
F1 154.710 TX/155.655 RX Sheriff car-base (rptr. at night)
F2 155.655 TX/155.655 RX Sheriff base, car-car
F3 155.565 TX/155.565 RX County Special Events
F4 155.475 TX/155.475 RX WISPERN (NLEEF)
F5 155.790 TX/155.790 RX Suburban Car-Car
F6 154.770 TX/155.790 RX Suburban Car-Base (except Monona)
F6 155.520 TX/155.520 RX Monona
F7 155.340 TX/155.340 RX State EMS
F8 155.400 TX/155.400 RX County EMS

COLUMBIA COUNTY (8-channel radios)
F1 156.030 TX/154.875 RX Sheriff's rptr.
F2 154.875 TX/154.875 RX Car-Car (talkaround)
F3 155.415 TX/155.415 RX Municipal (Portage, Columbus)
F4 155.475 TX/155.475 RX WISPERN (NLEEF)
F5 155.370 TX/155.370 RX Point-Point
F6 155.340 TX/155.340 RX State EMS
F7&F8 not in use

158.88 eTOC

JEFFERSON COUNTY (4-channel radios)
F1 158.910 TX/154.860 RX Sheriff car-base (rptr. capability)
F2 154.860 TX/154.860 RX Sheriff base, car-car
F3 155.145 TX/155.145 RX Municipal (future for Ft. Atkinson, Jefferson,Watertown)
F4 155.475 TX.155.475 RX WISPERN (NLEEF)

Carl (WI054) sent in a rather detailed and lengthy contribution about the WISCONSIN 1982 FRIEND IN THE SKY PROGRAM The effort for the year will be just about completed as many of our readers received this Newsletter, but it's well worth the pace for printing.
Police agencies are able to request 4 "medevac helicopters". They are manned over the major holiday weekends by military (national guard) aircrews.
1. AIR 10 - based at the Portage Airport. Covers I-90/94 area between the Dells and Arlington and a 25 mile band either side.
2.. AIR 11 - based at the Madison Airport. Covers I-90/94 area between Arlington and Albion and a 25 mile band either side.
3. AIR 12 - based at the Janesville Airport. Covers I-90/94 area between Albion and the IL/WI border and a 25 mile band either side (includes the Beloit EMS area).
4. AIR 20 - based at the West Band Airport. Covers an area bounded by Hwy. 26 on the west, Lake Michigan on the east, Hwy. 167 on the south and Hwy. 23 on the north.

The medevac helicopters will respond to requests for assistance from any police agency within their area of operation. The copters are e/w 4-channel radios with scanning capability.
1. Primary contact freq. 155.370 point-point.
2. Secondary contact freq. 155.340 statewide EMS, PL capability. (Hospitals and ambulances may have to switch their radios to "Emergency capability" is they are not e/w the PL capability of the helipcters. This should be on a very limited bases.
3. Secondary contact freq. 155.475 NLEEF-WISPERN.
4. Secondary contact freq. 155.400 ("6Z PL capability"). Dane County EMS (for AIR 10/11/12) or Secondary contact freq. 154.950TX, 155.595RX (PL capability) Ozaukee County SD (for Air 20)

The secondary area of operations is any area where an emergency requiring a medevac helicopter is needed and it is within the capability of the medevac helicopter to assist. (The helicopter can be airborne within 3 minutes after receiving a request for assistance - speed approximately 130 MPH).

Carl, thank you for 3 excellant contributions.

MILWAUKEE, WI P.D. FREQ. CHANGE Tom (WI-006) advises that the input freq. for the 155.640 rptr. (Tactical Squads) has been changed from old 156.030 to new 154.650.

Robert (MI-108) has sent on a detailed list of freqs. for the OAKLAND COUNTY, MI AREA

OAKLAND COUNTY
155.730 KQF725 Sheriff's Dispatch
154.980 Sheriff's LEIN
156.195 out (158.985 in) Road Commission rptr.

HAZEL PARK
155.010 KQD400 Police - "Station 8"
154.740 KQD400 Police - Dispatch
154.845 KQD400 Police - Detectives
154.340 KQE958 Fire - "Station 8"
155.820 KIL623 Dept. of Public Works

FERNDALE
155.010 KQF367 Police - "Station 6"
154.740 KQF367 Police - Dispatch
154.340 KQF229/KQF230 Fire "Station 11"

MADISON HEIGHTS
155.010 KQD915 Police - Dispatch "Station 1"
154.340 KJP445 Fire - "Station 7"
155.820 KBB998 Dept. of Public Works (also Police Reserve)

BERKELEY
155.010 KQE771 Police - "Station 4"

ROYAL OAK
155.010 rptr. (154.830 in) KQA673 Police - Dispatch "Station 8"
154.740 KQA673 Police
154.340 KQD623 Fire - "Station 9"
155.940 KQJ463 Dept. of Public Works(also Police Reserve)

PLEASANT RIDGE
155.010 KQD711 Police - "Station 3"

CLAWSON
155.595 rptr (154.800 in) KQC428 Police
154.235 ptrr (154.385 in) KQG319 Fire
153.410 Dept. of Poblic Works (Clawson Utilities)

TROY
155.595 rptr (154.800 in) KQD359 Police "Blue"
155.115 KGY758 Police - LEIN "Gray"
154.845 KQD359 Detectives
154.235 rptr (154.385 in) KCQ401 Fire "Red"
153.755 rptr (153.965 in) KQF987 Dept. of Public Works "Orange" (also used by Police & Fire)

OAK PARK
158.775 KQE321 Police

HUNTINGTON WOODS
155.010 KQD713 Police
154.040 KQH 826 Police & Fire Despatch.
154.040 KDV433 Dept. of Public Works

SOUTHFIELD
155.685 KQE536 Police - Dispatch
155.430 KQE536 Police
460.600 rptr. KYG527 Fire

PONTIAC
155.190 KQB233 Police - Dispatch
154.340 KQF709 Fire - "Station 1"
158.820 KQK530 Dept. of Public Works (also used at the Pontiac Silverdome)

Robert also advises that M.S.P. - DETROIT FREEWAY POST 29 uses the post number as a prefix to their car #'s when they communicate with the cars except in Detroit when they use the 38-prefix. This is the prefix Detroit used when they patrolled the freeways. The Detroit post cars are also equipped with UHF radios and are able to cummunicate with the Detroit P.D. dispatcher on any of its channels. (Thank you for answering a previously unanswered question in one of my previous columns - Ed).

My first contributions from OHIO comes from Scott, a new member. He's actively involved in fire monitoring in the south central part of the state. The following results were passed on:

NEWARK AIR FORCE BASE F.D. can also be found on 33.86 (Ch.1) and 33.90 (Ch.2).
HILLAR TWP/CENTERBURG V.F.D. can also be found on 33.92
HOMER V.F.D. can also be found on 33.88
FREDERICTOWN V.F.D. has been observed using a call sign of KQB523
FALLS TWP. V.F.D. can also be found on 33.86 (Editor's Note: It appears that 33.86 is a mutual aid or intersystem freq. in that part of OH due to the large amount of licenses present). Welcome aboard, Scott - and OH members. I'll be looking forward to future contributions.

With the Ohio fire contribution, this column comes to an end.

Happy Monitoring!

PUBLIC SAFETY - SOUTH CENTRAL:

Send Public Safety and Special Emergency frequencies, radio system details, and questions as follows — Alabama, Arkansas, Louisiana, Mississippi, Tennessee, Oklahoma, and Texas:

Ken Pehl, 108 E. Centre St., Fredericksburg, Texas 78624.

Greetings and welcome to another edition of this sub-column. This month's column is once again loaded to capacity thanks to many generous contributions. Before getting into the material, I would like to once again remind readers that the Houston/S.E. Texas Chapter of the RCMA is still getting organized at press time. If you are in the area, please lend your support to the chapter by joining up. This chapter has some great potential. Again anyone with questions or wishing to join in helping organize this area chapter, please contact Ed Lentz, TX-45, 1211 Vince, Pasadena, TX 77506. Or you may contact Robert Barker, TX-76, 15311 Parkville, Houston, TX 77068.

I would also like to comment on the RCMA/Dallas-Ft Worth Chapter's bulletin called "Scanning DFW". The bulletin is issued monthly. If you still haven't sent your supply of SASE's to the chapter to receive this free service then you are missing out on one of the most impressively written and produced bulletins I've ever seen. The bulletins are quite "professional" in their style and appearance--a real credit to the DFW Chapter group. The bulletins really get better every month. My hat is off to you, gang!

Now on to this month's material, which for the most part are continuations of previous columns. A note to those who sent contributions of input a while back and still haven't seen it in print, please bear with me. Your input will be printed as soon as possible. My input mailbox is simply overloaded!

We will start off with Part 2 of Gary Fitts, TX-94's, report on East Texas County Radio Systems. This month Gary looks at Rusk and Smith Counties.

From GARY, TX-94:

EAST TEXAS COUNTIES' RADIO SYSTEMS (Part 2)

RUSK COUNTY
(not to be confused with the city of Rusk located in Cherokee Co.)
LAW ENFORCEMENT

Ch. 1 154.815 R (155.850 in)--KUQ 571-- Rusk Co. SO--primary dispatch
Ch. 2 155.550 B/M--KUQ 572--Henderson City PD--primary dispatch
(Note: The Rusk Co. SO ch is listed as reversed in some frequency lists.)
There are two additional small towns with their own PD ch. and is also refered to as ch. 2. These towns are:
Overton City PD--ch 2--155.190--B/M--KUQ 574--Overton PD dispatch
Tatum City PD--ch 2--155.745--B/M--WZM 945--Tatum PD dispatch

The ch 1 is the same for all four agencies.
Unit numbers:
501--519-= Sheriff & Deputy units
520--529 = Sheriff's Reserves
801--805 = County J.P. Constables
Units 7,8, & 9 = County ambulances (are not equipped with direct hospital comm.)

101 = Henderson PD Chief
201--215 = Henderson PD--Patrol units
301--304 = Henderson PD units
104 = Overton PD Chief
141--149 = Overton PD--Patrol units
101 = Tatum PD Chief
201--210 = Tatum PD--Patrol units

State units on SO ch.:
DPS--- 1462--1468 = THP units
1406 = THP Sgt.
1638 = L&W
P&W--- 3208 = Warden

FIRE DEPT. CH's.

County Fire ch.-- 154.385 R (154.070 in)--KNAI 770--(note: new listing. May not be in active use yet.)--presumably dispatches all VFD's in county.

Overton City FD--37.260 B/M--KKR 442--(also used by Overton Ambulance)

HOSPITALS

Henderson Hospital-- 155.340 & 155.280--KRZ 905--B only--no direct contact with Rusk County ambulances. (editor's note: probably will be used for direct contact in near future.)

LOCAL GOV'T CH's.

45.200 B/M KBS 475-- Henderson City Govt ch--(may also be used by Henderson FD.) (Note: License appears to have expired.)

SMITH COUNTY

LAW ENFORCEMENT

Sheriff Dept.:
Ch. 1 154.725 R (155.910 in)--KUQ 575--Smith Co. SO--primary dispatch
Ch. 2 none at the present time
37.260--B/M--KKC 516--county license--use unknown at present
Unit numbers:
SO-1 = Sheriff
L1--L3 = Lt's.
S1--S5 = Sgt's
201--230 = Sheriff Deputies
400--480 = Sheriff's Reserves

State units on SO ch.:
P&W---8305 & 8313 = Wardens
8304 = Warden Supervisor

City of Tyler Police Dept.:
Ch. 1 460.275 R--KUQ 578 --Tyler PD--primary unit dispatch
Ch. 2 460.350 R--KUQ 578--Tyler PD--Detectives ch.
Ch. 3 460.225 C/C-- Tyler PD--car-to-car ch.--simplex
155.370--Base--KUQ 579--Texas Inter-city
155.310, 155.370, & 37.260--KKB 841-- Auxiliary VHF channels--not active
Unit numbers:
850 = PD Chief
852 & 853 = Asst. Chief's
C2--C5 = Captains
L16--L20 = Lt's.
S20--S32 = Sgts.
D40--D43 = Detectives
841--879 = Patrol units
880--882 = Motorcycles

FIRE DEPT. CH's:

Smith County Fire & Civil Defense Network-- 37.900--B/M-- various callsigns assigned to the various agencies operating on this net, as follows:

Fire Marshall Office-KWF 942	Overton VFD-KZX 781
Sheriff's Office-KJI 350	Red Springs VFD-KYC 831
Tyler PD-KLD 862	Troup VFD-KZE 735
Dixie VFD-KXK 287	Whitehouse VFD -KXX 579
Flint-Gresham VFD-KYI 839	Arp VFD-callsign unknown
Lindale VFD-KYB 741	Bullard VFD-callsign unknown
Noonday VFD-KOB 891	Unit 520= County Fire Marshall

Tyler City FD-- Ch. 1 154.355 R (154.355 in)--WAF 554
Ch. 2 154.355 simplex--repeater talk-around--fireground/tactical

Unit numbers: Units are in 6 stations---

Central	Stn 4	Stn 6
C-3 = Battallion Chief	Engine 4	Engine 6
Engine 1	Rescue 4	Tanker 16
Snorkel 1	Ladder 4	

Stn 2	Stn 5	Stn 7 (Airport)
Engine 2	Engine 5	Engine 7
Hosewagon 22	Rescue 5	Crash Unit 20

C-1 = FD Chief, C-2 = Asst. Chief, B-1 = Fire Marshall, B-2--B-5 = Fire Inv.
T-1 & T-2 = Training units

HOSPITALS & EMS/AMBULANCE CH's.

Eastex Medical Center Ambulance Service-KJS 731-BM Ch. 1 155.175--dispatch
(based at Medical Center Hosp.) B/M Ch. 2 155.340--Hosp/Amb comm.

Tyler Medical Center Hosp.--KTD 357-- 155.340--Hosp/Amb contact & in-house units
155.280--pager
163.250--pager

Texas Hospital Association--KTD 315--155.280--pager (a state license)

Pierce Moss, Inc. (private medical pager)--KIU 471--155.220--pager
--155.340--mobiles

Mother Francis Hospital--WQS 938--462.975--not active yet--future use

SCHOOL DISTRICTS CH's.

Tyler I.S.D. --KMK 722--155.805--buses and school administration
(Note: This callsign and frequency are listed in Police Call and other lists as a state of Texas license but it is used by and for Tyler School District.)
(Editor's note: Apparently the state provided the radio equipment and/or purchased the equipment and transfered the equipment to Tyler School District.)

LOCAL GOV'T CH's.

155.100--KRB 498--Smith County--use unknown at present

154.040--B/M--KAS 302 & KYO 337--Tyler City Public Works Dept.

Once again I would like to thank Gary for his wonderful reports. Next up is Part 2 of Russell, AR-3's report on Arkansas radio systems. This month Russell looks at the medical and fire systems in his state.

MONITORING ARKANSAS (Part Two)
by Russell Brummett, AR-3

MEDICAL

For medical purposes 155.340 is assigned in all areas of the state to hospitals and ambulances and is the most used frequency for this purpose. 155.280 is also assigned statewide but is used very little, at least in the central Arkansas area. An agency called "Central E.C.C." uses 155.340 and 155.235 and uses the latter for aiding ambulances in contacting the various hospital emergency rooms and in giving directions to those drivers who are unfamiliar with the area.

In the Greater Little Rock area The Medi-Vac Ambulance Company currently has the contract for ambulance service and can be heard on 155.220 communicating with it's units.

Other Medical frequency assignments in this area seem to be used mostly for building and parking lot security patrols or for paging. New UHF assignments from 463.000 to 463.175 have been noted in the FCC files in the Little Rock area but no activity has yet been confirmed. The Red Cross has been monitored on 47.420, 47.460, and on 453.000.

The following is a list of the various confirmed medical freqs. found in central Arkansas:

47.420	American Red Cross, Little Rock
47.460	" " " , " "
152.0075	Ark. Children's Hosp., " " (paging)
154.515(IB)	" " " , " " (security)
155.085(PL)	Lonoke County ambulance, Lonoke
155.160	Dr. Ellery C. Gay, Jr.,Little Rock
155.175	Conway Memorial Hospital, Conway
"	Ouachita Memorial Hospital, Hot Springs
155.205	City of Hot Springs, Hot Springs
155.220	Medi-Vac Ambulance Co., Little Rock
155.235	"Central E.C.C."
155.265	SE Ark. Mental Health Center, Sheridan
155.280	(widely assigned but little used)
155.295	St. Vincent's Infirmary, Little Rock (security)
155.325	Conway Memorial Hospital, Conway
155.340	STATEWIDE,Hosp./Amb./Hosp.
155.355	Saline Memorial Hospital, Benton
155.385	England Hospital, England
"	Hot Springs Memorial Hospital, Malvern
155.400	?(State of Ark., Bapt. Med. Cntr., Drs. Hosp. - all have assignments in Little Rock - use unconfirmed)
164.175	V.A. Hospital, Little Rock (paging)
168.525	Fort Roots V.A. Hospital, N.Little Rock (various uses)
453.000	Red Cross, Little Rock
453.025	Doctor's Hospital, Little Rock (paging)
462.750	Bapt. Med. Cntr., " (")
462.800	U.of A. " " , " (")
462.850	St. Vincent's Infirmary, " (")
460.900	Bapt. Med. Cntr., " (security)

FIRE

There is no statewide frequency used for fire fighting except for the wide area coverage of the State Forestry Commission's aircraft patroling forest fires and heard in this area on 151.220. The Ouachita National Forest Rangers can be heard patroling and fighting fires in Garland County to the west of here on 169.900.

The Pulaski County Sheriff Department uses it's second channel, 159.210 for paging-type call-outs of several rural Volunteer Fire Departments scattered throughout the county.

Others monitored here are:

154.385	L.R.F.D. main channel
154.190	" second "
153.950	" mobiles
154.025(PL)	N.Little Rock F.D.
154.400	Jacksonville F.D.
154.430	Sherwood F.D.
38.600	Camp Robinson, Army Natl. Guard, N.Little Rock (fire & security patrols)
173.5875	Little Rock AFBase Crash/Fire Crews
173.000	" " " " " (Air Natl. Guard)
154.145	Benton F.D.

And don't miss out on next month's outstanding conclusion on Russell's series as he looks at the Highway, Local Govt, Forestry, and Fish & Game radio systems in Arkansas. Don't miss it!

Two short reports received from other Arkansas area members that fit in with the above report are:

From Mike, AR-13: The Springdale FD in N.W. Arkansas is licensed to operate on 46.20 MHz with a call of KIZ 607. Each day between 6:00 to 6:30 PM the emergency page tone is tested followed by roll call of all units. Units roster is:

Engine 1---5, Engine 121, Engine 1W---5W
Units 4211, 4221, 4241, & 4251 Snorkel 1
Tanker 125 Squad 1---5, Squad 1W & 2W
Brush 1, Brush 129 Rescue 1

The Benton County FD, Rogers FD, and Bentonville FD also conduct emergency tone tests during the same time period. Frequencies to monitor: 46.10 & 46.06.

From David, AR-15: In response to the May column on severe weather monitoring David reports that in Central Arkansas CARES, Inc. (Central Arkansas REACT Emergency Service, Inc.) is active with Project Skywarn on CB Ch. 3 under the callsign KEN 8495. The group covers activity in Pulaski & Faulkner Counties, Arkansas.

Thanks, Mike & David for those pieces of additional information.

And last but not least we conclude the column for this month with radio codes for Washington Parish, LA Sheriff Dept. Again, as before, the list has been edited down to only those codes which are unusual or which are significantly different from the St. Tammany Parish 10-code list published in the June issue or which vary from the more common code numbers as given in the APCO 10-code list (as listed in the back of Police Call book.)

WASHINGTON PARISH SHERIFF DEPARTMENT 10-CODE (From David, LA-31)

10-31 Is lie detector available?
10-32 Is drunkometer available?
10-43 Pick-up person at _____
10-82 Reserve hotel room for ____
10-85 Officer ____ left this station for ___

EMERGENCY SIGNALS

31 Drunk	42 Holdup	55 Boy annoying (ed.---?)
32 Drunk driver	43 Assault	56 Traffic congestion
33 Hit & Run driver	44 Stabbing	57 Bad street conditions
34 Prowler	45 Shooting	58 Call dispatcher
35 Suspicious person	46 Larceny	
36 Fight	47 Purse snatcher	
37 Family trouble	48 Stolen car	
38 Mad dog	51 Fire	
39 Payroll transport	52 Auto accident	
40 Disorderly person	53 Suicide	
41 Burglary	54 Investigation	

EMERGENCY CODES
CODE 1 Approach without lights & siren
CODE 2 Approach with lights only
CODE 3 Approach with lights & sirens

In closing I would like to thank all who have contributed this month and to thank all who continue to contribute for the column. See you next month with more goodies.

PUBLIC SAFETY - NORTH CENTRAL:

Send Public Safety and Special Emergency frequencies, radio system details, and questions as follows — Iowa, Kansas, Missouri, Nebraska, N. Dakota, S. Dakota, and Minnesota:

PUBLIC SAFETY - SOUTHEAST:

Send Public Safety and Special Emergency frequencies, radio system details, and questions as follows — Florida, Georgia, N. Carolina, S. Carolina, W. Virginia, Virginia, and Disctrict of Columbia:

To followers of the Public Safety column in the above regions:

We're making progress! We anticipate having a new editor for "Public Safety - North Central" in place for the next issue. We still need an editor for "Public Safety - Southeast."

If you are interested, if you would like to find out more, please contact Assistant Editor Ginny Slick, 1 West Potomac, Williamsport, Maryland 21795.

Beginners Corner

Have a question? If you are a new scanner listener and don't understand something about monitoring that most everyone else seems to understand, send in your question. When possible, your question and the answer will be printed. No answers will be sent by return mail. Your name will not be printed. Write to:
David E. Crowley, 7234 Balson Ave., University City, MO 63130.

Q. How do I make the coaxial wave-trap filter mentioned in the last column?
A. Thanks to a reader, to whom our column's policy of anonimity prohibits a personal acknowledgement, the answer appears below:

You asked for info on cutting and using coaxial line wave-traps. Here goes nothing:

A) The first order of business is to buy 20' or so of whatever cable you use (enough to allow for a mistake on the first attempt), a coaxial "T" connector and some fittings. Since they don't seem to make "T" connectors for Motorola plugs, I went over to the UHF connectors used on CB and ham rigs. You can buy a screw-in Motorola adapter for a few bucks at Radio Shack to plug into your scanner.

B) Length of these traps is determined theoretically from the formulas in electronics texts, then fine-tuned a bit later. Traps are a quarter-wavelength of whatever frequency you want to get rid of, with a simple cut at the end. Don't let the coax get shorted at the cut end. Actually, a shorted half-wave trap will work also, but these can get pretty long at VHF-low and you risk induction between all those coils lying on the floor.

C) To get a theoretical quarter-wave in centimeters, first divide the frequency (in MHz) into the speed of light. Thus:

$$1: \quad \lambda_{(\text{IN CM.})} = \frac{30000}{f_{(\text{IN MHz})}}$$

This gives you a full wavelength. Dividing by four:

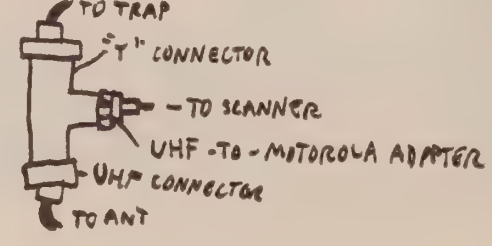
$$2: \quad L_{(\text{THEORETICAL})} = \frac{\left(\frac{30000}{f}\right)}{4}$$

D) Since we are dealing with wave propagation through a physical medium (the cable) rather than space, the theoretical quarter-wavelength is almost twice the ELECTRICAL wavelength, which actually determines the length of the trap. We must multiply the figure obtained from equation #2 by the "velocity factor" (usually given as a percentage). Sometimes this factor appears in the literature put out by the cable manufacturer. It varies with type of cable, type of dielectric or conductor used, etc.. A good ballpark estimation is 66%. So we get:

$$3: \quad L_{(\text{of trap})} = \frac{\left(\frac{30000}{f}\right)}{4} \times \text{V.F.} \quad (\text{expressed as a decimal})$$

E) Some people might want to convert the length in centimeters from equation #3 into inches. Just use the standard factor; one inch equals 2.54 cm..

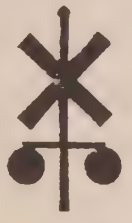
F) Now comes the fun part. Having carefully computed the length of the trap, now go and cut it several inches longer. This allows fine tuning! CAREFULLY connect one end to your UHF connector. DO THIS RIGHT! Loose connections mess up the tuning. Good directions for soldering these connectors appear in the technical publications of the American Radio Relay League such as THE RADIO AMATEUR'S HANDBOOK, THE VHF HANDBOOK, etc. Hint: tin the braid first and use a soldering GUN when soldering it into those infernal holes in the plug. Get it hot, but don't melt the dielectric. Now you take your "T" connector and (having let the plugs cool off for a long time) put the lead from your regular antenna on one end, the trap on the other, and plug the middle into your scanner, thusly:



(N.B.: TRAPS DON'T WORK UNLESS RIGHT WHERE ANT. CONNECTS TO SCANNER)

G) We now turn on the scanner and hope the interfering signal is on the air at the moment. The rest is seat-of-the-pants. Just whack away at the free end of the trap until the signal starts to drop in strength. Then trim the cable in smaller amounts (say an eighth to a quarter of an inch) until the signal is gone or practically so (in the case of really powerful signals, like an FM station across the street). Very high rejections are possible. If you trim too much, the signal starts becoming strong again. This is time to cut another trap or live with less rejection. THIS BUSINESS TAKES SOME PRACTICE!

H) To avoid all this cutting and fussing, you can cut the trap a bit short to begin with and then connect a 10-pF trimmer capacitor to the free end. This makes the trap tunable by turning the capacitor.



Railroads

Gary L. Sturm and
Bill Farmer, Editors

Send information about railroad frequencies and their uses, railroad radio system details, and related questions to:
Gary L. Sturm, 48781 Denton Rd., Apt. 37, Belleville, MI 48111.

We will continue the Chicago area railroad radio frequencies this month. Chicago is still one of the busiest cities for railroad radio traffic. The southside is especially busy with the ICG Markham Yard, the Chessie Barr Yard, and the IHB Riverdale Yard.

Illinois Northern (ATSF)

160.860	

Indiana Harbor Belt

160.980	Road
161.070	Yard
161.400	Maintenance of Way
160.545	Police
160.665	Gibson Yard Hump
161.565	Riverdale Yard Hump
160.485/161.535	Riverdale Yard Car Department

Indiana Interstate

160.575	General Operations

Louisville & Nashville

161.370	Road
161.145	Dolton Yard

Manufacturers' Junction

161.475	General Operations

Milwaukee Road

160.770	Road
161.430	Police and Maintenance of Way
161.235	Police: Car-to-car
160.515	Bensenville Hump
160.395	Bensenville Car Department

Missouri Pacific

160.410	Road
161.145	Dolton Yard

Norfolk and Western

161.250	Road #2 (ex-NKP)
160.440	Road #3 (ex-Wabash)
161.485	Calumet Yard Car Department
160.515	Calumet Yard Piggyback Facility
161.415	Landers Yard Car Department

RTA (ex-Rock Island commuters)

161.610	Road
160.635	Signal Department
161.340/161.220	PBX: East/West
160.680/161.220	PBX: North/South

Soo Line

161.520	Ch 2 Yard
161.085	Ch 3 Road (Stevens Point WI to Schiller Park IL)
160.620/160.470	Schiller Park IL Car Department

Since we are covering the railroads in the Chicago area, we'll also list the radio frequencies for the rapid transit system:

Chicago Transit Authority

470.9875/473.9875	Control
471.0625/474.0625	Lake/Dan Ryan Line
471.0375/474.0375	Milwaukee/Congress/Douglas
471.0875/474.0875	Ravenswood/Evanston/Skokie Swift
471.1125/474.1125	Englewood/Jackson Park/Howard

Out west in the shortline department, the Nevada Northern Railway installed a two-channel UHF radio system in late 1981. Channel 1 is equipped with a repeater near the midpoint of the line to enable the train crew to contact the dispatcher at East Ely, Nevada from any point on the railroad. For those times when the dispatcher is out of the office, the East Ely base station is equipped with phone patch capability so the train crew can make telephone calls from their caboose. Channel 2 is a simplex channel used for switching and engine-to-caboose communications.

Nevada Northern

462.125/467.125	Channel 1 Dispatcher
462.150	Channel 2 Road & Switching

We still need information on the following:

Southern	Atlanta GA
BN	Kansas City MO
UP	Kansas City MO
ICG	Memphis TN
Chessie	Silver Grove KY
GTW	Pontiac and Port Huron MI
RF&P	Potomac Yard
L&N	East St. Louis IL
CR	Altoona PA & Conway Yard PA
B&LE	Conneaut OH

Durango & Silverton Narrow Gauge
Any shortline radio frequencies
Any industrial railroad radio frequencies

If you need further information on any railroad radio frequencies please include a SSAE with your request.

We just received a publication from the Association of American Railroads, 1920 L Street, N.W., Washington DC 20036, entitled "The Need For and the Use of Radio by the Railroads." The remainder of our column this month will be excerpted from that 1973 pamphlet.

Some of the first tests of radio usage by the railroads were made in 1946. When the Federal Communications Commission made a block of frequencies available for use by the railroads, the railroad industry recognized the importance of radio to the safety and efficiency of their operations and established, through the Association of American Railroads, an organization to coordinate and police their radio operations. By use of computerized records, complete information is kept in the Washington AAR headquarters on the more than 16,000 licenses assigned in railroad service. A frequency assignment plan is maintained in Washington, and every new application for a frequency by a railroad is submitted to that office for coordination and recommended assignment before the license application is made to the Federal Communications Commission. This procedure has been in effect and has functioned successfully for over 30 years.

The railroads' need for radio has two distinct but nevertheless related aspects—one in yard and terminal areas, the other on the lines of road running, often for great distances, between such areas.

The Federal Communications Commission recognized the fact that the use of radio by the railroads was different from other services, and in establishing the railroad radio service, set up procedures to fit the conditions that exist, which in general, are as follows:

1. Base stations, mobile repeater stations and fixed stations are licensed individually—the same as other services.

2. Units of railroad rolling stock which are equipped with radio (locomotive, caboose, on-track work equipment, passenger cars, etc.) normally operate over an entire railroad, and often locomotives and cabooses operate over more than one railroad. Since these units of equipment are not confined to any one area, they are licensed in "train" service on a single license with the total number of units indicated for the entire railroad. Locomotives and cabooses which are used over more than one railroad operate their radio under the mobile license and use the frequency assigned to the railroad on which they are located. It is not unusual for this exchange of equipment to cause locomotives and cabooses to operate over four or more different railroads. This type of operation increases on a seasonal basis: for example, coal in the winter months, wheat during harvest season, etc. Hand-carried radio equipment in train service is also covered on the same license with the mobile units since these hand-carried units move about freely and are not permanently assigned to a given area.

3. Radios on vehicles, off-track work equipment, locomotives assigned to yard service and hand-carried units not used in "train" service are licensed in "general" service on a single license covering the entire railroad system. This is necessary because the units may be moved from one location to another at any time, on short notice. In fact, vehicles or off-track work equipment normally move from one area to another on a regular basis in connection with their work assignments.

Beginning next month we will go into more detail on what can be heard on each of the various types of channels (road, yard, car department, etc.) —Gary & Bill

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This column is for the exchange of space communications systems (manned or unmanned), frequency information, orbital data, hobby receiving equipment and antennas. Questions and column input pertaining to Space Communications Monitoring should be sent to:

Larry Van Horn (TN-014),1111 N. Carrier Pkwy., B-107, Grand Prairie, Texas 75050.

Welcome to the August Space Comm Column. In this month's column, I will continue our basic primer series with a space glossary. I will also include comments/questions by our membership. Without further ado...

Space Communications Beginner's Glossary

Active Satellite- An earth satellite carrying a station intended to transmit radiocommunication signals.

Aeronautical Mobile Satellite Service- A mobile satellite service in which mobile earth stations are located on board aircraft. Survival craft stations and emergency position indicating radio beacon stations may also participate in this service.

Amateur Satellite Service- A radiocommunication service using space stations on earth satellites for the same purposes as those of the amateur service.

Apogee- The farthest distance or maximum height above the earth during one satellite orbit.

Aquisition of Signal (AOS)- The time you can first hear a satellite signal, usually just after the satellite rises over the horizon.

Ascending Node- The point where the satellite crosses the equator traveling north.

Broadcast Satellite Service- A radiocommunication service in which signals transmitted or retransmitted by space stations are intended for direct reception by the general public.

Note: In the broadcast satellite service, the term "direct reception" shall encompass both individual reception and community reception.

Codestore- The special system that allows a Morse Code message to be placed in a memory storage unit and automatically broadcast with telemetry data.

Community Reception- (in the broadcast satellite service) The reception of emissions from a space station in the broadcast satellite service by receiving equipment, which in some cases may be complex and have antennas larger than those used for individual reception, and intended for use:

(a) By a group of the general public at one location, or

(b) Through a distribution system covering a limited area.

Deep Space- Space at distances from the earth approximately equal to or greater than, the distance between the earth and the moon.

Descending node- The point where a satellite crosses the equator traveling southward.

Doppler Effect- a change in the frequency with which radio waves from a given source reach an observer when the source or the observer are in rapid motion with respect to each other so that the frequency increases or decreases according to the speed at which the distance is decreasing or increasing.

Downlink- The frequency at which radio signals are received from a satellite.

Earth Exploration Satellite Service- A radiocommunication service between earth stations and one or more space stations in which:
(a) Information relating to the characteristics of the earth and it's natural phenomena is obtained from instruments on earth satellites.
(b) Similiar information is collected from airborne or earth based platforms.
(c) Such information may be distributed to earth stations within the system concerned.
(d) Platform interrogation may be included.

Earth Station- A station located either on the earth's surface or within the major portion of the earth's atmosphere intended for communication:
(a) With one or more space stations.
(b) With one or more stations of the same kind by means of one or more passive satellites or other objects in space.

ERP(Effective Radiated Power)- The transmitter output after transmission line losses, multiplied by antenna gain and output power are figured.

Elevation- Angular distance of a satellite above the horizon.

Fixed Earth Station- An earth station intended to be used at a specific point(fixed).

Fixed Satellite Service- A radiocommunication service:
(a) Between earth stations at specified fixed points when one or more satellites are used; in some cases this service includes satellite to satellite links, which may also be effected in the inner satellite service.
(b) For connection between one or more earth stations at specified fixed points and satellites used for a service other than the fixed satellite service.(i.e.-the mobile satellite service, broadcast satellite service, etc.)

Geostationary satellite- A satellite, the circular orbit of which lies in the plane of the earth's equator and which turns about the polar axis of the earth in the earth in the same direction and with the same period as those of the earth's rotation. The orbit on which a satellite should be placed to be a geostationary satellite is called the geostationary satellite orbit.

Gigahertz- (Ghz.) A unit of frequency equivalent to 1,000 Mhz.

Hertz- (Hz)A unit of frequency equivalent to one cycle per second. The terms hertz and cycles per second(cps) are synonymous and may be used interchangably.

Inclination- The angle at which the satellite crosses the equator.

Increment- The number of degrees longitude the satellite appears to move westward at the equator with each orbit.

Individual Reception- (In the broadcast Satllite Service) The reception of emissions from a space station in the broadcasting satellite service by simple domestic installations and in particular those possessing small antennas.

Inter Satellite Service- A radiocommunication service providing links between artificial earth satellites.

Kilohertz- (KHz.) A unit of frequency equivalent to 1,000 Hz.

Loss of Signal(LOS)- the time a satellite's signals pass out of range.

Maritime Mobile Satellite Service- A mobile satellite service in which mobile earth stations are located on board ship. Survival craft stations and emergency position indicating radiobeacon stations may also participate in this service.

Megahertz (MHz.)- A unit of frequency equivalent to 1,000 KHz.

Meteorological Satellite Service- An earth exploration satellite service for meteorological purposes.

Mobile Earth Station- An earth station intended to be used while in motion or during halts at unspecified points.

Mobile Satellite Service- A radiocommunication service:
(a) Between mobile earth stations and one or more space station or between space stations used by this service.
(b) Or between mobile earth stations by means of one or more space stations.
(c) and if the system so requires, for connection between these space stations and one or more earth stations at specified fixed points.

Multiple Access- A time sharing data processing system which can be used by a number of people at remote locations. Types of Multible access systems include:
(a) TDMA- Time Domain Multiple Access
(b) FDMA- Frequency Domain Multiple Access
(c) SSMA- Spread Spectrum Multiple Access
(d) SSB/FDM- Single Side Band Uplink/ Frequency Division multiplex downlink.
(e) PADMA- Pulse Address Multiple Access
Note: These multiple access terms will be further defined in later articles.

Pass- An orbit of a satellite.

Passband- The range of frequencies the satellite transponder transmits.

Passive Satellites- An earth satellite intended to transmit radiocommunication signals by reflection only. The satellite does not transmit from it's platform via it's own transmitter.

Perigee- The closest distance or minimum height above the earth during an orbit.

Polarization- In a radio wave, the direction of the electrical lines The radio wave is said to be horizontal, vertical, or cross polarized.

Satellite System- A space system using one or more artificial earth satellites.

Spacecraft- A manmade vehicle which is intended to go beyond the major portion of the earth's atmosphere.

Space Operation service- A radiocommunication service concerned exclusively with the operation of spacecraft, in particular tracking, telemetry, and telecommand. These functions will normally be provided within the service in which the space station is operating.

Space Radiocommunication- Any radiocommunication involving the use of one or more space stations or the use of one or more passive satellites or other objects in space.

Space Research Service- A radiocommunication service in which spacecraft or other objects in space are used for scientific, or technological research purposes.

Space Station- A station located on a object which is beyond, is intended to go beyond, or has been beyond, the major portion of the earth's atmosphere.

Space System- Any group of cooperating earth and/or space stations employing space radiocommunications for specific purposes.

Space Telecommand- The use of radiocommunication for the transmission of signals to a space station to initiate, modify,or terminate functions of the equipment on a space object, including the space station.

Space Telemetry- The use of telemetring for the transmission from a space station of results of measurments made in a spacecraft, including those relating to the functioning of the spacecraft.

Space Tracking- Determination of the orbit,velocity or instantaneous portion of an objects in space by means of radiodetermination, excluding primary radar, for the purpose of following the movement of the object.

Standard Frequency Satellite Service- A radiocommunication service using space stations on earth satellites for the same purposes as those of the standard frequency service.

Sun Synchronous- A type of orbit that approximates the sun's apparent motion. Allows the satellite to be heard at one's location at about the same time every day.

Telemetry Beacon- The transmitter aboard each satellite that enables the ground stations to monitor the satellites actual functions.

Transponder- The repeater aboard a satellite that retransmits signals it receives on another frequency.

Uplink- The frequency at which radio signals are transmitted up to the satellites.

The glossary is by no means complete. It is designed to be a list of terms to orientate the beginner in the space communication world. As needed new terms will be defined as needed.

Next Month

I will feature an acronym list of space systems, satellites, and organizations(past, present, and future).

Correspondance

I recently received a phone call from Mike Brewer of Dallas. Mike said that the TV commentator on the TV channel he was listening to said that the interfernce the listener was experiencing was being caused by satellite problems. Mike wanted to know if the satellite mentioned could be received on his scanner?

No Mike. These TV signals normally are downlinked on the 3.7 -4.2 GHz. band outside the range of your old Bearcat scanner. Stay tuned though and in future columns, show you how to monitor TV satellites.

Many thanks to Robert Berezowski (CAN-009), our Canadian editor, for his Canadian satellite information. I'll use it soon Rob in a future all Canada column.

Also another one of our northern neighbors, Douglas McDougall(CAN-041) wants information on Canadian Satellite frequencies in the 130-150 MHz. range. This information will be upcoming soon Douglas but briefly there is not as much activity in the 135-150 Mhz. range as there use to be. Mostly scientific/meteorological satellites occupy the range today. The only notable exceptions are the dying ATS satellites and the ever increasing Amateur satellites. The MFJ-321 converter would be a nice converter if your planning to setup a weather satellite monitoring post for weather satellite pictures from the different orbiting satellites.

On hold is a nice article on Precise Positioning and Navigation by GPS courtesy of George DuBois, our FCC Topics Editor. Also on hold for the October column spectacular on the Space Shuttle, features by Elmitt Eastcott (CALA-275) and Jeff Howell (KY-023). November 11,1982 is the tentative date on STS-5, the first operational flight and in preparation of the event the October column will feature monitoring and communication system information on the Space Shuttle

Till next month best of monitoring to all and 73's.

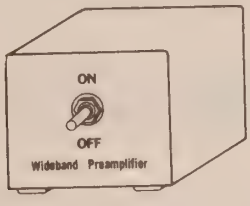
Technical Topics

Happy Davis
Technical Topics Editor

Send all equipment reviews, technical articles, technical tips, and questions on such subjects as receivers, antennas, preamps, accessory equipment, repeaters, links, tones, scramblers, non-voice data transmissions, or even computer applications for monitoring to:
Happy Davis, 7059 Dawson Road, Box 45, Cincinnati, Ohio 45243.

This month I have a bag full of all sorts of good things to share with you so let's get right down to business. Sit back and enjoy!

RF PREAMPLIFIERS

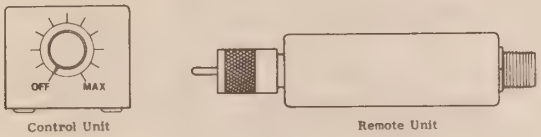


Bring in those weak signals with a wideband preamplifier. Two models to meet all your scanning requirements. The P-53 covers VHF from 30-300 MHZ with a useable gain to 400 MHZ. The P-56 covers both the VHF and UHF bands from 30-600 MHZ, with useable gain to 900 MHZ. Both models have 12 dB gain over the stated bandwidth with a noise factor under 2 dB.

Both preamps have 50 ohm input and output impedence with diode protected inputs to prevent transient damage. Easy to use-just connect in line between your antenna and scanner or other receiver-no tuning required. Motorola-type input and output jacks located on back of the set.

Compact unit measures $2\frac{1}{4}$"x$2\frac{1}{4}$"x2"h. Both require 12 volts DC at 10 milliamps, but can operate over a range of 12 to 16 volts. Furnished with a DC power cord. Also, an RF patch cable complete with Motorola plugs for connecting between the preamp and scanner is included.

RA-07 REMOTE RF PREAMPLIFIER

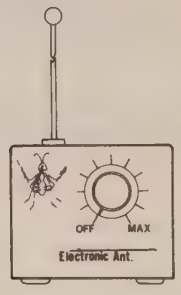


Now you can mount your RF Preamp where it should be-at the base of the antenna. The high gain of the RA-07 helps you overcome the coax signal loss and pick up more stations. (Did you know that good quality RG/58u has a loss of 9.5 dB per 100 feet at 400 MHz?)

The RA-07 is easy to install and use. The remote unit which is housed in a rugged die-cast aluminum case, plugs into the base of your antenna using a PL-259 connector, while the coax plugs into an SO-239 connector. Power for the unit is fed through the coax from the control unit so there are no additional wires to run.

The control unit connects to the external antenna jack on your scanner using an RF jumper cable equipped with a Motorola plug that is included. The high gain of the system (maximum of 20 dB on VHF and 12 dB on UHF) can be set to your requirements using the convenient gain control located on the front of the control unit.

The amplifier system requires 12 to 16 volts DC at 25 milliamps and can be powered from most scanners. A DC power cable is included. Also, included is a sample roll of Coax-seal to help you make your outside connections weather-tight.



Two units in one- the Deluxe Electronic Ant can be used as a preamplifier for your outside antenna in addition to its function as an electronic antenna using the built in 33" collapsable whip.

Covers 30-900 MHz with 20 dB gain on VHF and 12 dB on UHF. Noise figure under 2dB. Convenient front panel gain control allows you to select the amount of gain you need. 50 ohm input and output impedance. Motorola jack input; Motorola plug output. Operates on 12-16 VDC @ 30 mA. DC power cord furnished.

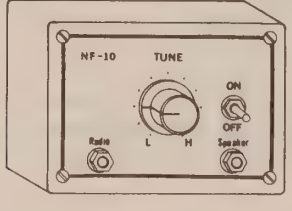
UNSCRAMBLER FOR POCKET SCANNERS

Designed specifically for use with pocket scanners, the M-11 is compact and self-contained. It features a built-in speaker, easy tuning and convenient on/off control. For use with phase inversion systems.

Connection to your pocket scanner is easy...just plug the cord from the M-11 into the scanner earphone jack. (Let them know if your scanner requires a plug other than the standard 1/8" (3.5 mm) mini-plug.)

High-impact plastic case measures $1\frac{1}{4}$"d x $2\frac{1}{4}$"w x 4"h. Complete with 9 volt battery. Velcro strips furnished for attaching the unit to your scanner.

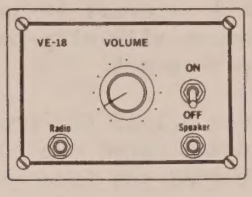
NF-10 TUNABLE NOTCH FILTER



Tired ears from masking or background tones? Get relief with a Tunable Notch Filter. It will block any tone from 1700 to 3400 Hz with a 30 dB notch. The filter is easily tuned over this range using the front panel control.

It also has a 2 watt audio amplifier and plugs into the external speaker jack on your radio. Unit measures 4"w x 3"h x 2"d and operates on 12 volts DC at 200 milliamps. A DC power cord and audio jumper cable are provided. Requires an external speaker.

VE-18 VOLUME EQUALIZER.



Stop fiddling with your radio volume control. Let the Volume Equalizer even out those volume fluctuations for you. A change of 25 dB at the input results in only a 5 dB change at the output.

Also, noise outside the voice band is filtered out by a 4th order 300 to 3000 Hz bandpass filter to make the audio more understandable and pleasant to listen to. You set the volume you want (up to 2 watts) with the volume control on the VE-18. Ideal for scanners and CBs.

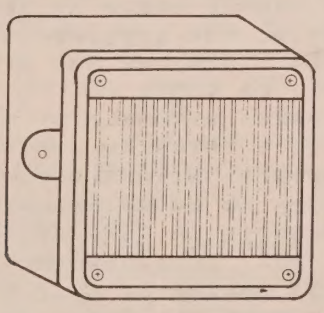
Plugs into the external speaker jack on your radio. Requires 12 volts DC at 200 milliamps and an external speaker. A DC power cord and audio jumper cable are furnished. Unit measures 4"w x 3"h x 2"d.

AC to DC ADAPTER

Hers's a device that replaces batteries conveniently and reliably on most equipt ment. Adapter plugs into ordinary 120 VAC, 60 Hz house current. The switch-selectable output can be 3,4.5, 6, 7.5, 9 or 12 volts DC at up to 300 milliamps. Has built-in polarity reversal switch. The 6 foot cord connects to a 4-way plug, allowing complete flexibility for hook-up to battery operated devices. UL listed.

This adapter will power any accessories that require 12 volts DC for operation.

EXTERNAL SPEAKER



Improve your scanner's sound with an external speaker. Most current production scanners, especially programmable sets, use a small speaker that has an adverse effect on sound quality. The audio quality and volume can be improved by using an external speaker. The external speaker comes complete with cable, miniature plug, mounting hardware and bracket. It can be used for either mobile or base sets. Eight ohm impedence - 5 watts RMS.

As a special service, they can furnish the S-03 External Speaker with any one of the following circuits built into it: M-25 Unscrambler, NF-10 Notch Filter or VE-18 Volume Equalizer. All you'll need to do is plug it into the external speaker jack on your scanner and connect the DC power cord (included) to a 12 volt DC source.

Other products available are crystal testers, scan recorders, and the new Frequency Notch Filter. This effective filter will tune out TV and FM broadcast and reject short wave. No longer will aircraft signals come bursting through. Amateur repeaters and mobile telephones will stop paralyzing your scanner. This Frequency Notch Filter is the hot one to get!

Now that you have read about and seen all of the preceeding accessories, anyone wishing any information on the aforementioned can contact Capri Electronics, Rt. 1, Canon, Georgia, 30520. They will send you free literature or you may call them (404-376-3712).

May 8th I was at the Electra Corporation factory and would like to report that Bearcat has changed their BC 100 keyboard. It looks the same but has been all reworked and is excellent. Also, the antenna connector problem has been ironed out and the new units will be shipped in the future with a BNC connector on the antenna. Most of the frequency problems have been straightened out by changing the IF crystal. However, the 460.100 is still a problem due to the fact that it is caused by the oscillator in the unit. Don't dispair on this one as they are still working on it. I have received alot of mail and will get it all answered as soon as possible. Also, I will be answering in upcoming articles some of your questions. Keep the letters coming. I would also appreciate any 10 codes and maps that any of you might have. Next month I will review the Fox 10-60 and the JIL SX 200.

Happy Monitoring
Happy Davis

NEW MEMBERS LIST

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CT 066 CAJAR, MARIO;36 MANSFIELD AVE;NEW BRITAIN, CT 06051
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FL 156 BAKER, BRUCE A;P.O. BOX 7133;WINTER HAVEN, FL 33880
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NC 048 KERR, KENNETH H;P.O. BOX 2512;RALEIGH, NC 27602
NC 049 HALL, A. C.;305 N. MAIN ST;WAKE FOREST, NC 27587
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OH 135 NORTON, WILLIAM L;1930 SCARBORO ST;SPRINGFIELD, OH 45504
OH 136 MILLER, JIM;6021-323RD ST;TOLEDO, OH 43611
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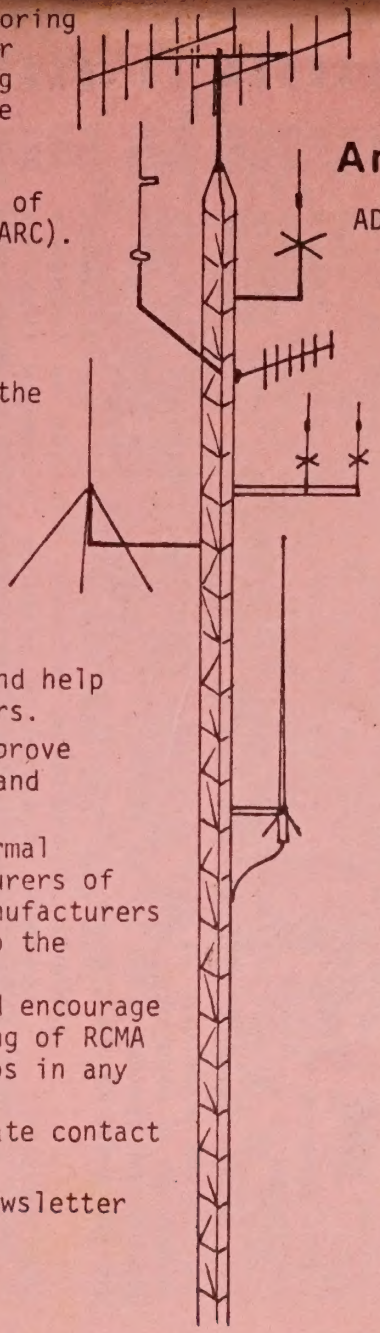
The Radio Communications Monitoring Association is a radio club for persons interested in listening to two-way communications above 30 MHz as a hobby. RCMA was founded in May 1975 and is a Full Member of the Association of North American Radio Clubs (ANARC).

The goals of RCMA are:

1) To provide a fraternity for those who seriously pursue the hobby of monitor radio listening.
2) To try to be knowledgeable about two-way radio systems and operations.
3) To promote an understanding of the legal and ethical uses of monitor receivers.
4) To share information with and help other monitor radio listeners.
5) To try to understand and improve receivers, antenna systems and related equipment.
6) To offer suggestions and formal recommendations to manufacturers of monitor receivers and to manufacturers of other products related to the hobby.
7) To offer suggestions for and encourage the organizing and conducting of RCMA meetings and tours for groups in any geographic area.
8) To encourage and to facilitate contact between members.
9) To publish a regular club newsletter devoted to the hobby.



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